67TH CONGRESS
1st Session

SENATE

DOCUMENT
No. 36

AMERICAN INSTRUCTORS OF THE DEAF

REPORT

OF

THE PROCEEDINGS OF THE TWENTY-SECOND MEETING OF THE JOINT CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF

Held JUNE 28–JULY 3, 1920, at MOUNT AIRY
PHILADELPHIA, PA.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1921

SENATE RESOLUTION 86.

Reported by Mr. Moses.

IN THE SENATE OF THE UNITED STATES,
June 6 (calendar day, June 7), 1921.

Resolved, That the Report of the Proceedings of the Twenty-second Meeting of the Convention of the American Instructors of the Deaf, held June 28–July 3, 1920, be printed as a Senate document.

Attest:

GEORGE A. SANDERSON,
Secretary.

LETTER OF SUBMITTAL.

COLUMBIA INSTITUTION FOR THE DEAF,
Washington, D. C., April 15, 1921.

To the Congress of the United States:

In accordance with the act of incorporation of the Convention of American Instructors of the Deaf, approved January 26, 1897, I have the honor to submit the proceedings of the twenty-second meeting of the convention, held at Mount Airy, Philadelphia, June 29 to July 3, 1920, inclusive.

I have the honor to be, very respectfully, your obedient servant,

PERCIVAL HALL, *President.*

Hon. CALVIN COOLIDGE,
President of the Senate.
Hon. FREDERICK H. GILLETT,
Speaker of the House.

LETTER OF TRANSMITTAL.

OGDEN, UTAH, *December 7, 1920.*

PERCIVAL HALL, Litt. D.,
President Columbia Institution for the Deaf,
Washington, D. C.

DEAR SIR: In accordance with the act of incorporation of the Convention of American Instructors of the Deaf, approved January 26, 1897, requiring a report to Congress through the president of the Columbia Institution for the Deaf and Dumb at Washington, D. C., "of such portions of its proceedings as its officers shall deem to be of general public interest and value concerning the education of the deaf," I have the honor to transmit herewith the most interesting and valuable portions of the proceedings of the twenty-first meeting of the convention, held at Mount Airy, Philadelphia, Pa., June 28 to July 3, 1920, inclusive, and to ask that this report be laid before Congress.

Very respectfully,

FRANK M. DRIGGS, *Secretary.*

ACT OF INCORPORATION.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Edward M. Gallaudet, of Washington, in the District of Columbia; Francis D. Clarke, of Flint, in the State of Michigan; S. Tefft Walker, of Jacksonville, in the State of Illinois; James L. Smith, of Faribault, in the State of Minnesota; Sarah Fuller, of Boston, in the State of Massachusetts; David C. Dudley, of Colorado Springs, in the State of Colorado; and John R. Dobyns, of Jackson, in the State of Mississippi, officers and members of the Convention of American Instructors of the Deaf, and their associates and successors, be, and they are hereby, incorporated and made a body politic and corporate in the District of Columbia, by the name of the "Convention of American Instructors of the Deaf," for the promotion of the education of the deaf on the broadest, most advanced and practical lines, and by that name it may sue and be sued, plead and be impleaded, in any court of law or equity, and may use and have a common seal and change the same at pleasure.

SEC. 2. That the said corporation shall have the power to take and hold personal estate and such real estate as shall be necessary and proper for the promotion of the educational and benevolent purposes of said corporation, which shall not be divided among the members of the corporation, but shall descend to their successors for the promotion of the objects aforesaid.

SEC. 3. That said corporation shall have a constitution and regulations or by-laws and shall have the power to amend the same at pleasure: *Provided*, That such constitution and regulaltions or by-laws do not conflict with the laws of the United States or of any State.

SEC. 4. That said association may hold its meetings in such places as said incorporators shall determine, and shall report to Congress, through the president of the Columbia Institution for the Deaf and Dumb at Washington, District of Columbia, such portions of its proceedings and transactions as its officers shall deem to be of general public interest and value concerning the education of the deaf.

Approved, January 26, 1897.

OFFICERS OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF, 1920-1923, STANDING EXECUTIVE COMMITTEE, AND OTHER STANDING COMMITTEES.

OFFICERS.

President.—Dr. Percival Hall, Kendall Green, Washington, D. C., president of the Columbia Institution for the Deaf.

Vice president.—E. McK. Goodwin, Morgantown, N. C., superintendent of the North Carolina School for the Deaf and Dumb.

Secretary.—Ignatius Bjorlee, Frederick, Md., principal of the Maryland School for the Deaf.

Treasurer.—Dr. J. Schuyler Long, Council Bluffs, Iowa, teacher in the Iowa School for the Deaf.

DIRECTORS.

[The directors, with the officers, form the standing executive committee.]

Thomas C. Forrester, Rochester, N. Y., superintendent and principal of the Western New York Institution for Deaf Mutes.

H. T. White, Jacksonville, Ill., superintendent of the Illinois School for the Deaf.

Dr. A. H. Walker, St. Augustine, Fla., president of the Florida School for the Deaf and the Blind.

STANDING COMMITTEES.

Normal section.—E. A. Gruver, of Iowa, chairman; Dr. Thomas Fox, of New York; Miss Elizabeth Peet, of the District of Columbia; Lyman Steed, of Pennsylvania; Miss Helen G. Throckmorton, of Nebraska.

Oral section.—Miss Enfield Joiner, of New Jersey, chairman; Miss Julia M. Connery, of Missouri; Miss Mabel K. Jones, of New York; Miss Frances McKean, of Massachusetts; Madison J. Lee, of Kentucky.

Auricular section.—Miss Grace Coleman, of the District of Columbia, chairman; Miss Pattie Thomason, of North Carolina; Dr. John B. Wright, of New York; T. C. Forrester, of New York; Ignatius Bjorlee, of Maryland.

Art section.—Lyman Steed, of Pennsylvania, chairman; Ignatius Bjorlee, of Maryland; Mrs. O. A. Betts, of New York; E. A. Stevenson, of Kansas; Miss Agnes Suman, of the District of Columbia.

Kindergarten section.—Mrs. Anna C. Hurd, of Rhode Island, chairman; Miss Eugenia Welsh, of North Carolina; Miss Louise Upham, of Pennsylvania.

Industrial section.—John E. Travis, of Indiana, chairman; H. J. Menzemer, of Montana; E. A. Stevenson, of Kansas; L. L. Johnson, of New Jersey; Duncan Cameron, of Wisconsin.

Eastern local section.—Herbert E. Day, of the District of Columbia, chairman; Miss Mabel Adams, of Massachusetts; O. A. Betts, of New York; A. C. Manning, of Pennsylvania.

Southern local section.—Wirt A. Scott, of Mississippi, chairman; J. C. Harris, of Georgia; G. C. Huckaby, of Louisiana; G. D. Euritt, of Virginia; J. H. Eddy, of Arkansas.

Western local section.—Francis H. E. O'Donnell, of California, chairman; T. d'Estrella, of California; George B. Lloyd, of Washington; Alfred L. Brown, of Colorado; Max Woodbury, of Utah.

OFFICERS OF THE CONVENTION, 1917-1920.

President.—Dr. Percival Hall, Kendall Green, Washington, D. C., president of the Columbia Institution for the Deaf.

Vice president.—Dr. William K. Argo, superintendent of the Colorado School for the Deaf and Blind, Colorado Springs, Colo.

Secretary.—Frank M. Driggs, Ogden, Utah, superintendent of the Utah School for the Deaf and the Blind.

Treasurer.—J. Schuyler Long, Council Bluffs, Iowa, instructor in the Iowa School for the Deaf.

DIRECTORS.

[The directors, with the officers, form the standing executive committee.]

J. W. Jones, Columbus, Ohio, superintendent of the Ohio State School for the Deaf.

Dr. N. F. Walker, Cedar Spring, S. C., superintendent of the South Carolina School for the Deaf and the Blind.

E. A. Gruver, Rome, N. Y., principal Central New York Institution for Deaf Mutes.

ACTIVE MEMBERS.

LIFE MEMBERS.

Humbert, Mrs. L. A., Colorado Springs, Colo.
Larson, L. M., Santa Fe, N. Mex.

MEMBERS.

Adams, Mabel E., 38 Percival Street, Dorchester, Mass.
Argo, W. K., Colorado Springs, Colo.
Arnold, Corbett T., Mount Airy, Philadelphia, Pa.
Atkinson, Mary, Hartford, Conn.
Bateman, George, Halifax, Nova Scotia.
Berry, Amelia E., Station M, New York, N. Y.
Betts, A. O., Rome, N. Y.
Betts, Mrs. A. O., Rome, N. Y.
Birck, Vernon, care of Goodyear Co., Akron, Ohio.
Bjorlee, Ignatius, Frederick, Md.
Booth, F. W., Omaha, Nebr.
Bray, J. Emery, Delavan, Wis.
Brown, A. L., Colorado Springs, Colo.
Burchard, Prudence, Station M, New York, N. Y.
Burdette, F. L., Romney, W. Va.
Burke, Sister Mary Anne, Buffalo, N. Y.
Burns, S. Roby, 35 Ringold Street, Freeport, Ill.
Burt, W. N. Wilkinsburg, Pittsburgh, Pa.
Charles, C. W., 441 South Ohio Avenue, Columbus, Ohio.
Cloud, Dr. J. H., 2606 Virginia Avenue, St. Louis, Mo.
Coleman, Grace, Kendall School, Washington, D. C.
Connor, W. O., Santa Fe, N. Mex.
Crouter, Dr. A. L. E., Mount Airy, Philadelphia, Pa.
Day, Herbert E., Kendall Green, Washington, D. C.
Deem, Hattie, 1518 South Theresa Street, St. Louis, Mo.
Deem, Mary, Kendall School, Washington, D. C.
d'Estrella, Th., Berkeley, Calif.
Driggs, F. M., Ogden, Utah.
Eickoff, Arlington, Flint, Mich.
Ely, C. R., Kendall Green, Washington, D. C.
Ely, Grace, Kendall Green, Washington, D. C.
Fay, Dr. E. A., Kendall Green, Washington, D. C.
Fay, Elizabeth, Hartford, Conn.
Fay, Helen, Kendall School, Washington, D. C.
Fitzgerald, Edith, Delavan, Wis.
Foley, Julia, Mount Airy, Philadelphia, Pa.
Fox, Dr. T. F., Station M, New York, N. Y.
Forrester, T. C., Rochester, N. Y.
Fusfeld, Irving, Kendall Green, Washington, D. C.
Gaarder, Ida, Kendall Green, Washington, D. C.
Gardner, Isaac, Station M, New York, N. Y.
Gawith, Francis W., Clarke School, Northampton, Mass.
Goodwin, McK., Morganton, N. C.
Griffin, Howard, Tucson, Ariz.
Griffin, Mary E., Colorado Springs, Colo.
Gruver, E. A., Council Bluffs, Iowa.
Hall, Dr. Percival, Kendall Green, Washington, D. C.
Harrington, Lois, Kendall Green, Washington, D. C.
Harris, J. C., Cave Springs, Ga.
Hauberg, Margaret, Baton Rouge, La.
Heizer, Evalyn B., Indianapolis, Ind.
Herdman, Pearl, 3425 Henrietta Street, St. Louis, Mo.
Hill, Helen, capitol, Albany, N. Y.
Hill, Dr. Robert, capitol, Albany, N. Y.
Hotchkiss, Dr. John B., Kendall Green, Washington, D. C.
Hughes, Frederick, Kendall Green, Washington, D. C.
James, Sister Mary De Paul Institute, Pittsburgh, Pa.
Johnson, J. L., Trenton, N. J.
Jones, Florence, Flint, Mich.
Jones, J. W., Columbus, Ohio.

MEMBERS—continued.

Jones, W. G., 99 Fort Washington Avenue, New York, N. Y.
La Crosse, Dr. E. L., 1 Mount Morris Park, New York, N. Y.
Linaberry, G. E., Raleigh, N. C.
Long, J. S., Council Bluffs, Iowa.
Manning, A. C., Wilkinsburg, Pittsburgh, Pa.
Manning, F. H., Talladega, Ala.
Marbut, Musa, Staunton, Va.
McIlvaine, J. A., Mount Airy, Philadelphia, Pa.
McManaway, H. M., Staunton, Va.
Menzemer, H. J., Boulder, Mont.
Moeller, F. A., 1107 Prospect Ave., Kansas City, Mo.
O'Hara, Junaita, 113 Buffalo Ave., Brooklyn, N. Y. (St. Josephs School).
O'Donnel, F. H. E., Berkeley, Calif.
Peet, Elizabeth, Kendall Green, Washington, D. C.
Pittinger, C. M., Indianapolis, Ind.
Pittinger, Mrs. C. M., Indianapolis, Ind.
Plummer, Anna E., Lynn, Mass.
Pope, Alvin, Trenton, N. J.
Porter, Geo., Trenton, N. J.
Roberts, A. L., Kendall School, Washington, D. C.
Rodwell, Thomas, Faribault, Minn.
Roper, Anna M., 2620 Clifton Ave., St. Louis, Mo.
Rogers, Augustus, Danville, Ky.
Russell, Elizabeth, Gallaudet School, St. Louis, Mo.
Scott, Wirt, Jackson, Miss.

MEMBERS—continued.

Senseing, Barton, Mount Airy, Philadelphia, Pa.
Settles, Clarence, Mount Airy, Philadelphia, Pa.
Sherwood, Esther, Omaha, Nebr.
Steed, Lyman, Mount Airy, Philadelphia, Pa.
Stegemerten, H. J., Overlea, Md.
Steidemann, Clara, 4110 N. Eleventh Street, St. Louis, Mo.
Stevenson, E. A., Olathe, Kans.
Tate, J. N., Faribault, Minn.
Taylor, Elizabeth R., Portland, Me.
Taylor, W. E., Boulder, Mont.
Teegarden, Alice M., Station M, New York, N. Y.
Temple, Sara Small, 1 Mount Morris Park, New York, N. Y.
Thomason, Pattie, Morganton, N. C.
Thompson, Beth, Olathe, Kans.
Throckmorton, H. G., Omaha, Nebr.
Timberlake, Josephine, Volta Bureau, Washington, D. C.
Travis, John E., Indianapolis, Ind.
Walker, A. H., St. Augustine, Fla.
Walker, N. F., Cedar Springs, S. C.
Warner, Ella Scott, Beverly, Mass.
Weaver, James A., Brattleboro, Vt.
Wheeler, F. R., Hartford, Conn.
White, H. T., Jacksonville, Ill.
Wright, John Dutton, 1 Mount Morris Park, New York, N. Y.
Wright, L. L., Flint, Mich.
Yale, Dr. Caroline A., Northampton, Mass.
Zorn, W. H., 922 Studer St., Columbus, Ohio.

MEMBERS OF THE AMERICAN ASSOCIATION PRESENT AT THE MOUNT AIRY MEETING.

Adams, Mabel E., 38 Percival Street, Dorchester, Mass.
Alcorn, Sophia K., Stanford, Ky.
Allen, Edward E., Perkins Institute for the Blind, Watertown, Mass.
Anderson, Mrs. J. Scott, School for the Deaf, Trenton, N. J.
Andrews, Harriet E., School for the Deaf, Rochester, N. Y.
Arbaugh, Laura L., Macon, Ga.
Archer, T. V., 1300 Newton Street, Austin, Tex.
Arthur, Bertha, 608 Oakland Avenue, Austin, Tex.
Asbury, Emily J., 122 Cherry Street, Talladega, Ala.
Ashoff, Lillian, Caroline Club, Hartsdale, N. Y.
Barnes, E. Kathleen, Hometon College, London, England.
Barron, Mary G., 51 North Main Street, Hartford, Conn.
Bateman, George A., School for the Deaf, Halifax, Nova Scotia.
Bell, Frances K., School for the Deaf, Flint, Mich.
Bell, Josephine, 236 Walnut Street, Danville, Ky.
Bensing, Elsie, 414 Broadway, Camden, N. J.
Bergen, Gertrude, 203 West Kingshighway, Haddonfield, N. J.
Berkeley, Anna B., School for the Deaf, Jacksonville, Ill.
Betts, O. A., School for the Deaf, Rome, N. Y.
Bjorlee, Ignatius, School for the Deaf, Frederick, Md.
Bodycomb, Margaret, Cresheim Hall, Mount Airy, Philadelphia, Pa.
Booth, F. W., School for the Deaf, Omaha, Nebr.
Bork, Emma, 2816 Highland Avenue, Cincinnati, Ohio.
Bovee, Emilie D., School for the Deaf, Trenton, N. J.
Bowles, Betty L., Main and Woodward Streets, Cincinnati, Ohio.

Bowman, Blanche, 1970 East One hundred and sixteenth Street, Cleveland, Ohio.
Brand, Elizabeth R., 1204 Highland Building, East Liberty, Pittsburgh, Pa.
Brehm, Elizabeth, School for the Deaf, Rochester, N. Y.
Broadbent, Martha, Moscow, Pa.
Brown, Gertrude, School for the Deaf, Fulton, Mo
Bruhn, Martha, 601 Pierce Building, Copley Square, Boston, Mass.
Bruce, Lila, 818 South Kingshighway, St. Louis, Mo.
Burch, Mary A., Danville, Ky.
Buchanan, Nancy C., Virginia School for the Deaf and Blind, Staunton, Va.
Burke, Amy M., 79 William Street, East Orange, N. J.
Burke, Cecelia, 143 Highland Avenue, Columbus, Ohio.
Burt, Dr. W. N., School for the Deaf, Edgewood Park, Pa.
Carpenter, Miss K. B., The Golden Swann Inn, Mount Airy, Pa.
Carter, Anita, School for the Deaf, Chefoo, China.
Clarke, Juliet D., 18 East Forty-first Street, New York City.
Cobb, Annie M., School for the Deaf, Mount Airy, Pa.
Cobb, Jennie L., 1312 Wood Street, Wilkinsburg, Pa.
Coleman, Grace D., Kendall Green, Washington, D. C.
Connery, Julia M., 818 South Kingshighway, St. Louis, Mo.
Connor, W. O., School for the Deaf, Santa Fe, N. Mex.
Constantine, Jolliette E., 1114 Newman Street, Indianapolis, Ind.
Crain, Lila M., 602 Huntington Chambers, 30 Huntington Avenue, Boston, Mass.
Croker, Gertrude W., 225 East Twenty-third Street, New York City.
Crouter, Dr. A. L. E., School for the Deaf, Mount Airy, Philadelphia, Pa.
Daniels, Margaret E., 14 North Seventh Street, Newark, N. J.
Davis, H. Amanda, 1120 West College Avenue, Jacksonville, Ill.
Denison, Charlotte E., Clarke School, Northampton, Mass.
Denman, Gertrude, Austin Institute for the Deaf, Brattleboro, Vt.
Dennis, Mary, Middleport, Ohio.
Donnelly, Katherine A., 88 Mount Hope Avenue, Providence, R. I.
Draper, Estella, 85 Spring Street, Portland, Me.
Driggs, Frank M., School for the Deaf, Ogden, Utah.
Duffett, Frances L., 3842 Flad Avenue, St. Louis, Mo.
Dugane, Mary, 47 West Forty-fourth Street, New York City.
Dunbar, Evelina, American School for the Deaf, Hartford, Conn.
Dunlap, S. Cornelia, School for the Deaf, Council Bluffs, Iowa.
Eels, Jean, 1 West Eighty-fifth Street, New York City.
Elmore, Mary, Lancaster, Ky.
Ely, Grace D., 6 Kendall Green, Washington, D. C.
Emerson, Grace, 98 North Pine Avenue, Albany, N. Y.
Emory, Nadine, Central Institute for Deaf Mutes, Rome, N. Y.
Fay, Charles J., 14 Wall Street, New York City.
Fay, Elizabeth, 51 North Main Street, West Hartford, Conn.
Fay, Helen, 3 Kendall Green, Washington, D. C.
Ferguson, Margaret D., Central Institute for Deaf Mutes, Rome, N. Y.
Fitts, Irene, 103 West Cedar Avenue, Merchantville, N. J.
Flatley, Stella M., School for the Deaf, Green Bay, Wis.
Foley, Elizabeth, 306 Ardmore Avenue, Trenton, N. J.
Forrester, T. C., School for the Deaf, Rochester, N. Y.
Frear, Hilda M., 937 Monroe Avenue, Scranton, Pa.
Gardner, Grace B.
Geddes, James T., 801 Wood Street, Wilkinsburg, Pa.
Gildea, Marie, Gibson, Guernsey County, Ohio.
Godwin, Arthur J., 8232 Norwood Avenue, Chestnut Hill, Philadelphia, Pa.
Goldstein, Dr. Max A., 3858 Westminster Place, St. Louis, Mo.
Goodwin, E. McK., School for the Deaf, Morganton, N. C.
Granger, Audria J., School for the Deaf, Sioux Falls, S. Dak.
Gray, Mabel H., Dudley Hall, Northampton, Mass.
Griffeth, Grace G., 1037 West Woodruff Avenue, Toledo, Ohio.
Grosvenor, Nellie L., Bruce Street School for the Deaf, Newark, N. J.
Gruver, Elbert A., School for the Deaf, Council Bluffs, Iowa.
Haerlin, Katherine C., 83 Marne Street, Newark, N. J.
Hall, Grace, School for the Deaf, Coles and Seventh Streets, Jersey City, N. J.
Hales, Amy M., School for the Deaf, Trenton, N. J.
Harris, J. C., School for the Deaf, Cave Spring, Ga.
Hatfield, Gertrude, East High School, Akron, Ohio.
Hays, Dr. Harold, 2178 Broadway, New York City.

Heath, Marcia, 311 West Genesee Street, Lansing, Mich.
Hedrick, Jennie, 3321 N Street NW., Washington, D. C.
Heizer, Evelyn B., 1406 Bellfontaine Street, Indianapolis, Ind.
Henderson, Jennie M., 57 Birch Street, Roslindale, Mass.
Hill, A. C., 865 Madison Avenue, Albany, N. Y.
Hill, E. Pinckney, 803 Court Street, Fulton, Mo.
Hillis, Anna, School for the Deaf, Rome, N. Y.
Hines, Edward J., 91 Horace Street, East Boston, Mass.
Hoeffler, Albertine, Woodsfield, Ohio.
Hoffner, Gertrude S., 3026 North Broad Street, Philadelphia, Pa.
Holden, Ruth, School for the Deaf, Trenton, N. J.
Holding, Anna L., 58 South Maple Avenue, East Orange, N. J.
Humphreys, Evelyn, School for the Deaf, Fulton, Mo.
Hurd, Anna C., 520 Hope Street, Providence, R. I.
Jameson, Annie E., 1150 Evergreen Avenue, Plainfield, N. J.
Johnson, J. Lewis, School for the Deaf, Trenton, N. J.
Joiner, Enfield, Talledega, Ala.
Jones, Eleanor P., 14 Darte Avenue, Carbondale, Pa.
Jones, J. W., School for the Deaf, Columbus, Ohio.
Jones, Lucy D., 626 North Cascade Avenue, Colorado Springs, Colo.
Jones, Mabel Kingsley, 121 Lexington Avenue, New York City.
Kane, Edith B., 60 West One hundred and twenty-ninth Street, New York City.
Kearns, Carrie Wallace, 225 East Twenty-third Street, New York City.
Kearny, Mollie, School for the Deaf, Trenton, N. J.
Keller, Mary B., Romney, W. Va.
Keller, M. H., Romney, W. Va.
Kelly, M. Grace, 2923 Merwyn Avenue, Pittsburgh, Pa.
Kendall, Edith F., 88 Mount Hope Avenue, Providence, R. I.
Kenfield, Coralie N., 915 Shreve Building, San Francisco, Calif.
Kimball, Caroline F., 39 Jackson Street, East Lynn, Mass.
Kingsley, Anna M., 239 Webster Avenue, Jacksonville, Ill.
Kinzie, Cora E., 1606 Locust Street, Phiadelphia, Pa.
Kinzie, Rose, 1606 Locust Street, Philadelphia, Pa.
Kirk, Helen, School for the Deaf, Trenton, N. J.
Kling, Gertrude N., Golden Swan, Mount Airy, Philadelphia, Pa.
Knox, Emma D., 4545 North Seeley Avenue, Ravenswood Station, Chicago.
Lackey, Lillian B., School for the Deaf, Mount Airy, Philadelphia, Pa.
La Crosse, Dr. E. L., Wright Oral School, 1 Mount Morris Park west, New York.
Lambert, Agnes, Waynesboro, Va.
Landers, Addie L., Goodwin Hall, Morganton, N. C.
Larkin, Anna, St. Joseph's Institute, Westchester, N. Y.
Leonard, Bessie N., Clarke School, Northampton, Mass.
Lewin, Lucie M., 1056 West Main Street, Staunton, Va.
Lineberry, G. E., corner Jones and McDowell Streets, Raleigh, N. C.
Lit, D. Ellis, Jenkintown, Pa.
Lloyd, Ella B., School for the Deaf, Trenton, N. J.
Lloyd, George B., School for the Deaf, Trenton, N. J.
Loar, Mary, 311 C Street NW., Washington, D. C.
Long, Dr. J. Schuyler, School for the Deaf, Council Bluffs, Iowa.
Lynes, Evelyn, School for the Deaf, Colorado Springs, Colo.
McBride, Sara, 2401 Koa Avenue, Honolulu, Hawaii.
McCallum, Blanche, 28 West Dane Street, Beverly, Mass.
McCowen, Dr. Jennie, the Courtland, Davenport, Iowa.
McCowen, Mary T., 428 Normal Parkway, Chicago, Ill.
McGinnis, Mildred A., 818 South Kingshighway, St. Louis, Mo.
McGuigan, Mrs. C. H., Mystic Oral School, Mystic, Conn.
McGuire, Quincy, 98 Pine Avenue North, Albany, N. Y.
McKee, Lottie H., 4412 Walnut Street, Philadelphia, Pa.
McKeen, Frances, Clarke School, Northampton, Mass.
McKenzie, Lilla B., 818 South Kingshighway, St. Louis, Mo.
McLaughlin, Helen, School for the Deaf, Trenton, N. J.
McManaway, H. M., Virginia School for the Deaf and Blind, Staunton, Va.
Macaulay, Josephine, 27 Thorndike Street, Beverly, Mass.
Macomber, Marianna, Clarke School, Northampton, Mass.
Manning, A. C., School for the Deaf, Edgewood Park, Pa.
Manning, F. H., School for the Deaf, Talladega, Ala.
Mara, I. M., 465 Military Avenue, Detroit, Mich.

Marbut, Musa, School for the Deaf, Staunton, Va.
Martin, Mary, 121 Minerva Avenue, Jackson, Miss.
Mason, Marie K., 2253 Main Street, Buffalo, N. Y.
Mauzy, Christina, School for the Deaf, Morganton, N. C.
Menzemer, H. J., School for the Deaf, Boulder, Mont.
Miller, Ada R., Cedar Springs, S. C.
Mitchell, Dorothy, School for the Deaf, St. Augustine, Fla.
Moore, Mrs. S. M., 3½ Hohde Avenue, St. Augustine, Fla.
Morris, Dorothy, Rogers Hall, Clarke School, Northampton, Mass.
Nelson, Margaret A., 520 Hope Street, Providence, R. I.
Nelson, Margaret C., 626 Clay Street, Scranton, Pa.
Newhall, Rebecca, 1606 Locust Street, Philadelphia, Pa.
Newlee, Clara E., 428 Normal Parkway, Chicago, Ill.
Nitchie, Mrs. Edward B., 18 East Forty-first Street, New York City.
Norris, Susan H., School for the Deaf, Cave Spring, Ga.
Norton, Carrie B., 335 Washington Street, Traverse City, Mich.
Numbers, Mary, Clarke School, Northampton, Mass.
Nuss, N. Irma, 5214 Germantown Avenue, Philadelphia, Pa.
O'Brien, Bertha, St. Joseph's Institute, Westchester, N. Y.
O'Donnell, Francis H. E., 2728 Hillegas Avenue, Berkeley, Calif.
O'Hara, Juanita I., St. Joseph's Institute, Westchester, N. Y.
O'Rourke, Mary, 1420 Dagmar Avenue, Pittsburgh, Pa.
Orr, Marie P., School for the Deaf, Lancaster, Pa.
Osborn, Virginia A., Woodward Street, Cincinnati, Ohio.
Park, May Edna, 48 Round Hill, Northampton, Mass.
Patten, Helen T., 333 Cabot Street, Beverly, Mass.
Pattison, Mrs. E. W., 4354 Olive Street, St. Louis, Mo.
Peck, A. B., Kensington, Md.
Pincott, Winifred L., Northeast Industrial School for the Deaf, Beverly, Mass.
Pittenger, O. M., School for the Deaf, Indianapolis, Ind.
Pollard, Nannie A., Seventh Street and Third Avenue, Faribault, Minn.
Pope, Alvin E., School for the Deaf, Trenton, N. J.
Porter, Frances H., School for the Deaf, Trenton, N. J.
Porter, Mrs. N. Todd, jr., 165 Gates Avenue, Montclair, N. J.
Potter, Adella F., box 42, Chautauqua, N. Y.
Pratt, M. E., 225 East Twenty-third Street, New York City.
Protheroe, Beatrice, 838 Monroe Avenue, Scranton, Pa.
Pumphrey, Marian, Talladega, Ala.
Pybas, Adelaide H., 904 Lexington Avenue, New York City.
Quinn, Josephine F., Seventh Street and Third Avenue, Faribault, Minn.
Ralli, Pauline, 120 North Euclid Avenue, Westfield, N. J.
Randal, Mrs. Verna, room 309 Young Women's Christian Association Building, 1020 McGee Street, Kansas City, Mo.
Renard, Ella S., 1718 North Fifty-fifth Street, Philadelphia, Pa.
Reinhardt, Anna C., Home for Little Deaf Children, Kensington, Md.
Ridgway, Pearl A., 934 Taylor Avenue, Scranton, Pa.
Ritchey, Florence R., 418 Summit Avenue, Hagerstown, Md.
Roberts, Margaret H., 818 South Kingshighway, St. Louis, Mo.
Roger, Isabella S., Acerwood School, Devon, Pa.
Rogers, Augustus, School for the Deaf, Danville, Ky.
Rolshouse, Theresa, 1211 Morrow Street, Wilkinsburg, Pa.
Russell, Elizabeth R., 3437 Henrietta Street, St. Louis, Mo.
Samuelson, Estelle E., 17 North Fourteenth Street, Flushing, Long Island, N. Y.
Saunders, Nida, 324 South West Avenue, La Crosse, Wis.
Savage, Julia W., 88 Mount Hope Avenue, Providence, R. I.
Scott, Wirt A., Instructor for the Deaf, Jackson, Miss.
Sellner, Bertha L., School for the Deaf, Newark, N. J.
Settles, Clarence J., School for the Deaf, Mount Airy, Philadelphia, Pa.
Sharp, B. Howard, School for the Deaf, Trenton, N. J.
Shaw, Mrs. Caroline, 325 West Cortland, Jackson, Mich.
Shaw, Mary B., 150 East Thirty-fifth Street, New York City.
Shillady, Wilma, 6 Chesterfield Road, Worcester, Mass.
Shuford, Dr. Felix B., School for the Deaf, Austin, Tex.
Skinner, Adalia, Deansboro, N. Y.
Smith, Alice Grant, 309 South Hicks Street, Philadelphia, Pa.
Smith, Bessie, 370 Stanton Avenue, Detroit, Mich.

Snyder, Mrs. H. D., School for the Deaf, Jacksonville, Ill.
Snyder, H. D. School for the Deaf, Jacksonville, Ill.
Sparks, Margaret, Rogers Hall, Clarke School, Northampton, Mass.
Sparrow, Rebecca E., School for the Deaf, Rochester, N. Y.
Staples, Anna L., 41 Maple Street, East Lynn, Mass.
Steed, Lyman, School for the Deaf, Mount Airy, Philadelphia, Pa.
Stevenson, Elwood A., School for the Deaf, Olathe, Kans.
Stone, Elizabeth, 1303 East Sixtieth Street, Chicago, Ill.
Stowell, Agnes, 470 Eastern Parkway, Brooklyn, N. Y.
Sutherland, Lula M., School for the Deaf, Rochester, N. Y.
Tate, J. N., School for the Deaf, Faribault, Minn.
Taylor, Elizabeth R., 85 Spring Street, Portland, Me.
Taylor, Florence, 415 West One hundred and eighteenth Street, New York City.
Taylor, Nellie M., 705 Jefferson Street, Fulton, Mo.
Taylor, Paul W., 1601 Thirty-fifth Street NW., Washington, D. C.
Taylor, W. E., School for the Deaf, Boulder, Mont.
Thackston, Virginia, Cedar Spring, S. C.
Thomas, Helen N., 73 Crawford Street, Grace Hall Street, Boston, Mass.
Thomason, Pattie, School for the Deaf, Morganton, N. C.
Thompson, Anne C., 225 East Twenty-third Street, New York City.
Thompson, Frances, 4165 Carrollton Avenue, Indianapolis, Ind.
Throckmorton, Helen G., School for the Deaf, Omaha, Nebr.
Tilson, Mary D., School for the Deaf, Trenton, N. J.
Timberlake, Josephine, 1601 Thirty-fifth Street NW., Washington, D. C.
Torry, Gertrude, 102 Auditorium Building, Chicago, Ill.
Townsend, Anne L., 244 Oakland Avenue North, Sharon, Pa.
Trinder, Mrs. E. Kinlock B., General Delivery, Halifax, N. S., Canada.
Tucker, Anna, 1606 Locust Street, Philadelphia, Pa.
Upham, Louise, Cresheim Hall, Mount Airy, Philadelphia, Pa.
Van Adestine, Gertrude, School for the Deaf, Twelfth and Marquette Streets, Detroit.
Van Ingen, Elizabeth, School for the Deaf, Rochester, N. Y.
Walker, Dr. A. H., School for the Deaf, St. Augustine, Fla.
Walker, Jane B., 244 West One hundred and fourth Street, New York City.
Walker, Dr. N. F., School for the Deaf, Cedar Spring, S. C.
Walters, Katherine R., 7425 Germantown Avenue, Mount Airy, Philadelphia, Pa.
Warfield, Ethel, 3259 Chestnut Avenue, Baltimore, Md.
Warner, Fannie G., West Sand Lake, N. Y.
Watrous, Helen, R. F. D. No. 1, Gales Ferry, Conn.
Welsh, Eugenia T., Goodwin Hall, Morganton, N. C.
Welty, Harry L., School for the Deaf, Sioux Falls, S. Dak.
Wheeler, F. R., American School for the Deaf, Hartford, Conn.
White, H. T., School for the Deaf, Jacksonville, Ill.
White, Marie M., 225 East Twenty-third Street, New York City.
Wilcox, K. Viola, Home Oral School, Sand Springs, Okla.
Wilcox, Rachel, Rogers Hall, Clarke School, Northampton, Mass.
Wilcoxson, Florence, School for the Deaf, Council Bluffs, Iowa.
Wildt, Dorothy N., Central Institute for Deaf Mutes, Rome, N. Y.
Williams, Florence R., 846 North Main Avenue, Scranton, Pa.
Willoughby, J. Evelyn, Clarke School, Northampton, Mass.
Wright, Grace L., School for the Deaf, Newark, N. J.
Wrigley, Dorothy, School for the Deaf, Trenton, N. J.
Wycoff, Edith, Athlone, Apartment East 6, Omaha, Nebr.
Yale, Caroline A., Clarke School, Northampton, Mass.
Ziegler, Clara M., 1 Ellis Street, Roxbury, Mass.
Zimmerman, Elinor C., 556 North Fourteenth Street, East St. Louis, Ill.

OFFICERS OF THE SOCIETY OF PROGRESSIVE ORAL ADVOCATES.

Dr. Max A. Goldstein, president, St. Louis, Mo.
Mr. F. W. Booth, Omaha, Nebr., first vice president.
Mr. J. D. Wright, New York, second vice president.
Mr. E. A. Gruver, Council Bluffs, Iowa, third vice president.
Miss Mildred A. McGinnis, St. Louis, secretary-treasurer.

CONSTITUTION OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF.

ARTICLE I.—*Name.*

This association shall be called the Convention of American Instructors of the Deaf.

ARTICLE II.—*Objects.*

The objects of this association shall be:

First. To secure the harmonious union, in one organization, of all persons actually engaged in educating the deaf in America.

Second. To provide for general and local meetings of such persons from time to time, with a view of affording opportunities for a free interchange of views concerning methods and means of educating the deaf.

Third. To promote, by the publication of reports, essays, and other writings, the education of the deaf on the broadest, most advanced, and practical lines, in harmony with the sentiments and practice suggested by the following preamble and resolutions unanimously adopted by the convention in 1886 at a meeting held in Berkeley, Calif.:

"Whereas the experience of many years in the instruction of the deaf has plainly shown that among the members of this class of persons great difference exist in mental and physical conditions and in capacity for improvement, making results easily possible in certain cases which are practically and sometimes actually unattainable in others, these differences suggesting widely different treatment with different individuals: It is therefore

"*Resolved*, That the system of instruction existing at present in America commends itself to the world, for the reason that its tendency is to include all known methods and expedients which have been found to be of value in the education of the deaf, while it allows diversity and independence of action and works, at the same time, harmoniously, aiming at the attainment of an object common to all.

"*Resolved*, That earnest and persistent endeavors should be made in every school for the deaf to teach every pupil to speak and read from the lips, and that such efforts should be abandoned only when it is plainly evident that the measure of success attained does not justify the necessary amount of labor: *Provided*, That the children who are given to articulation teachers for trial should be given to teachers who are trained for the work, and not to novices, before saying that it is a failure: *And provided*, That a general test be made and that those who are found to have sufficient hearing to distinguish sounds shall be instructed aurally."

Fourth. As an association to stand committed to no particular theory, method, or system, and adopting as its guide the following motto: "Any method for good results; all methods, and wedded to none."

ARTICLE III.—*Members.*

SECTION 1. All persons actively engaged in the education of the deaf may enjoy all the rights and privileges of membership in the association on payment of the prescribed fees and agreeing to this constitution.

SEC. 2. Eligibility of applicants is to be determined by the standing executive committee and reported to the convention.

SEC. 3. Any person may become an honorary member of the association, enjoying all the rights and privileges of membership, except those of voting and holding office, on being elected by vote of the association.

SEC. 4. Each person joining the association shall pay a fee of $3 for the first year and $1 annually thereafter.

SEC. 5. There shall be in addition a registration fee of $1 for each person registered at each regular meeting.

SEC. 6. Any member of the association desiring to commute the annual dues into single payment for life shall be constituted a life member on the payment of $20.

SEC. 7. Applications for membership must be made to the treasurer, who will receive all membership fees and dues. All privileges of membership are forfeited by the nonpayment of dues.

ARTICLE IV.—*Officers.*

SECTION 1. At each general meeting of the association there shall be elected by ballot a president, vice president, secretary, treasurer, and three directors; these seven persons forming the standing executive committee of the convention. They shall continue in office until their successors are elected, and shall have power to fill vacancies occurring in their body between general meetings.

SEC. 2. There shall also be elected by ballot at each general meeting of the association nine chairmen of committees, as follows: One for a normal section, one for an industrial section, one for an oral section, one for an art section, one for an auricular section, one for a kindergarten section, one for an eastern local committee, one for a western local committee, and one for a southern local committee. Before the adjournment of each general meeting, or immediately thereafter, the standing executive committee and the nine elected committee chairmen, acting together, shall elect four persons to membership in each of the nine committees herein provided for.

SEC. 3. The general management of the affairs of the association shall be in the hands of the standing executive committee, subject to the provisions of such by-laws as the association shall see fit to adopt.

SEC. 4. All officers and members of committees must be active members of the association in regular standing.

SEC. 5. The standing executive committee shall make a full report at each general meeting of all the operations of the association, including receipts and disbursements of funds, since the preceding meeting.

ARTICLE V.—*Meetings.*

SECTION 1. General meetings of the association shall be held triennially, but the standing executive committee may call other general meetings at their discretion.

SEC. 2. Local meetings may be convened as the standing executive committee and the committees on local meetings shall determine.

SEC. 3. Proxies shall not be used at any meeting of the association, but they may be used in committee meetings.

SEC. 4. Notice of general meetings shall be given at least four months in advance and notice of local meetings at least two months in advance.

SEC. 5. The business of the association shall be transacted only at general meetings, and at such meetings 100 voting members of the association must be present to constitute a quorum.

ARTICLE VI.

In the first election of officers held under the provisions of this constitution, said election occurring immediately after its adoption, all duly accredited active members of the Fourteenth Convention of American Instructors of the Deaf shall be entitled to vote, said members making payment of their membership fees to the treasurer at the earliest practicable opportunity after he shall have been elected.

ARTICLE VII.—*Amendments.*

This constitution may be amended by an affirmative vote of two-thirds of the members present at any general meeting of the association: *Provided*, That at such meeting at least 150 voting members of the association shall be present.

ARTICLE VIII.

Devises and bequests may be worded as follows: "I give, devise, and bequeath to the Convention of American Instructors of the Deaf, for the promotion of the cause of the education of the deaf, in such manner as the standing executive committee thereof may direct," etc.; and if there be any conditions, add "subject only to the following conditions, to wit:——."

SEC. 6. Any member of the association desiring to commute the annual dues into single payment for life shall be considered a life member on the payment of $20.

SEC. 7. Applications for membership must be made to the treasurer, who will receive all membership fees and dues. All privileges of membership are forfeited by the nonpayment of dues.

ARTICLE IV.—*Officers.*

SECTION 1. At each general meeting of the association there shall be elected by ballot a president, vice-president, secretary, treasurer, and three directors; these seven persons forming the standing executive committee of the convention. They shall continue in office until their successors are elected, and shall have power to fill vacancies occurring in their body between general meetings.

SEC. 2. There shall also be elected by ballot at each general meeting of the association nine chairmen of committees as follows: One for a normal section, one for an industrial section, one for an oral section, one for an art section, one for an auricular section, one for a kindergarten section, one for an eastern local committee, one for a western local committee, and one for a southern local committee. Before the adjournment of each general meeting, or immediately thereafter, the standing executive committee and the nine elected committee chairmen, acting together, shall elect four persons to membership in each of the nine committees herein provided for.

SEC. 3. The general management of the affairs of the association shall be in the hands of the standing executive committee, subject to the provisions of such by-laws as the association shall see fit to adopt.

SEC. 4. All officers and members of committees must be active members of the association in regular standing.

SEC. 5. The standing executive committee shall make a full report at each general meeting of all the operations of the association, including receipts and disbursements of funds, since the preceding meeting.

ARTICLE V.—*Meetings.*

SECTION 1. General meetings of the association shall be held triennially, but the standing executive committee may call other general meetings at their discretion.

SEC. 2. Local meetings may be convened as the standing executive committee and the committees on local meetings shall determine.

SEC. 3. Proxies shall not be used at any meeting of the association, but they may be used in committee meetings.

SEC. 4. Notice of general meetings shall be given at least four months in advance and notice of local meetings at least two months in advance.

SEC. 5. The business of the association shall be transacted only at general meetings, and at such meetings 100 voting members of the association must be present to constitute a quorum.

ARTICLE VI.

In the first election of officers held under the provisions of this constitution, said election occurring immediately after its adoption, all duly accredited active members of the Fourteenth Convention of American Instructors of the Deaf shall be entitled to vote, said members making payment of their membership fees to the treasurer at the earliest practicable opportunity after he shall have been elected.

ARTICLE VII.—*Amendments.*

This constitution may be amended by an affirmative vote of two-thirds of the members present at any general meeting of the association: *Provided*, That at such meeting at least 150 voting members of the association shall be present.

ARTICLE VIII.

Devises and bequests may be worded as follows: "I give, devise, and bequeath to the Convention of American Instructors of the Deaf, for the promotion of the cause of the education of the deaf, in such manner as the standing executive committee thereof may direct," etc.; and if there be any conditions, add "subject only to the following conditions, to wit:—"

PROCEEDINGS OF THE MEETING

PROCEEDINGS OF THE MEETING.

JOINT CONVENTION OF AMERICAN TEACHERS OF THE DEAF.

MOUNT AIRY, PHILADELPHIA, PA., JUNE 28 TO JULY 3, 1920.

FIRST DAY, MONDAY, JUNE 28, 1920.

PROGRAM.

8 p. m.:

General meeting, Dr. Percival Hall presiding.

Welcome extended by President A. R. Montgomery, of the board of directors of the Pennsylvania Institution, and Dr. A. L. E. Crouter, superintendent.

Response for the American Association to Promote the Teaching of Speech to the Deaf, Supt. E. McK. Goodwin, North Carolina school.

Response for the Convention of American Instructors of the Deaf, Dr. N. F. Walker, of the South Carolina school.

Response for the Society of Progressive Oral Advocates, Dr. Max Goldstein, of the Central Institute, St. Louis.

Response for the Canadian schools, Mr. George Bateman, principal of the Halifax school.

Informal reception and refreshments.

The convention was called to order in the chapel of Wissinoming Hall at 8 o'clock p. m., Monday, June 28, 1920, by Dr. Percival Hall.

Dr. HALL. It is my great pleasure to call to order this evening the first joint meeting of the Convention of American Instructors of the Deaf, the Association for the Promotion of Teaching Speech to the Deaf, and the Society of Progressive Oral Advocates.

This is the twenty-second meeting of the convention, the tenth meeting of the association, and, I believe, the third meeting of the Society of Progressive Oral Advocates.

Our meeting will be opened with an invocation by Rev. Thomas S. Cline, of Grace Episcopal Church of Mount Airy.

(Prayer by Rev. Thomas S. Cline.)

Dr. HALL. I shall ask Prof. Herbert E. Day, of Gallaudet College, and Mr. James E. Weaver, of the Pennsylvania Institution, to act as assistant secretaries for the meeting.

I will ask Miss Peet and Messrs. Lloyd, Stephenson, Ely, and A. H. Walker to assist Miss Herdman with the interpreting.

The invitation so kindly extended to our three organizations by Dr. Crouter and the authorities of the Pennsylvania Institution to meet here on the occasion of the one hundredth anniversary of this great school was most cordially accepted by all three bodies. We will be welcomed here to-night first by President Montgomery, of the board of directors of this institution. [Applause.]

ADDRESS OF MR. A. R. MONTGOMERY, PRESIDENT BOARD OF DIRECTORS.

Mr. MONTGOMERY. Mr. President and ladies and gentlemen, members of the convention: It is my great pleasure and privilege to welcome you this evening to a joint meeting of the convention of American teachers of the deaf and to the centennial anniversary of the founding of this institution, the Pennsylvania Institution for the Deaf and Dumb.

The presence of such a large number of delegates, not only from this country but from foreign lands, attests the great interest that is being taken at the present time in the instruction of the deaf.

There will come before your meeting, naturally, many subjects for discussion in which there inevitably will be differences of opinion, but all roads lead to Rome, and whatever differences may exist as to methods of instruction, I am sure that we all are united and animated by the same motives and with the same desire of attainment in the education and elevation of the pupils under our care, that they may become industrious, self-supporting, and God-fearing people.

There is no question that deafness is a great handicap in life's progress, and we should do all that we can and all that is possible to lighten that handicap. With the desire for improvement—we know that good work, very good work, has been done, and good garments have been made from defective material—we should keep in mind that with the highest motives and intentions we should strive to progress upward and onward, always looking forward to success in our work. "Labor omnia vincet"; whatever obstacles may arise before us—of which there will be any number, and we very likely will be tempted many times to give up—remember that extra labor and extra care will produce very wonderful results. Very often enthusiasts exaggerate their own work and claim more for it than is desirable, but truth is stronger than fiction and will triumph in the end, even though it may sometimes seem to be long in coming.

The old saying that "great oaks from little acorns grow" is particularly exemplified in this institution in the growth which it has made in the last 100 years. Founded in 1820 by a few devoted philanthropists with a small school of a few pupils—I think only about 12—in a small house in Market Street, Philadelphia, it has grown in 100 years to a school of 525, with a large corps of instructors both in the academic and industrial departments, and occupying all these halls which you see—and they are not small ones.

This institution is rather unique in several ways. Since its foundation there have been but seven presidents, seven secretaries, and five treasurers. Bishop William White, D. D., the first bishop of the Episcopal Church in the State of Pennsylvania, served for 16 years; Rev. Philip F. Mayer, D. D., served for 23 years; Dr. Franklin Bache for 4 years; Hon. George Sharswood, who was chief justice of the State, for 21 years; Mr. F. Mortimer Lewis for 16 years; Mr. Emlen Hutchinson for 29 years; while the present incumbent, who succeeded Mr. Hutchinson last October, has been in office not quite 1 year.

Mr. Hutchinson's service was much longer than that of any of the others, and it was largely owing to his zeal and devotion, ably supported, and his ideas carried out by Dr. Crouter, that well-known and devoted friend of the deaf who has been with the institution first

as a teacher and finally now as its superintendent, for 53 years—a long record [applause]—it has been largely owing to their united efforts that the institution has been placed in the splendid position which it now occupies.

Some of the members of the present board are descendants of the original founders. The secretary, Mr. William White, is descended from and bears the same name as the first president, Bishop William White. Mr. John Lewis, who was secretary for thirty-odd years, is now a vice president, and follows his father, who was treasurer for 30 years, and his uncle, Mr. F. Mortimer Lewis, who was president for 16 years; the president is a grandson of Hon. Horace Binney, one of the first vice presidents.

I will not keep you longer, but will extend to you a genuine, hearty, Philadelphia welcome, placing all the departments, the grounds, and the buildings at your disposal, and feeling sure that Miss Hess, our efficient matron, with her competent assistants, will do all in her power to make your stay, while attending your convention, both comfortable and enjoyable. [Applause.]

Dr. HALL. The very cordial welcome which we have received from President Montgomery will be added to by Dr. Crouter, superintendent of the institution.

ADDRESS OF DR. A. L. E. CROUTER, SUPERINTENDENT THE PENNSYLVANIA INSTITUTION FOR THE DEAF AND DUMB, MOUNT AIRY, PHILADELPHIA.

Mr. Chairman, friends, ladies, and gentlemen: Mr. Montgomery was kind enough in his address to mention the length of service that I have given to the institution. Your presence here to-night makes me feel just as young as I did when I first came to the school. [Applause.] Your presence affords me the keenest pleasure. I have looked forward to this meeting for a long time with anticipations of the greatest enjoyment, and I assure you from the bottom of my heart that I rejoice in your presence.

Many years have passed since a convention of this character has been held. If I mistake not, the last general convention was held in the Fanwood School, New York, some 30 years ago. It proved an exciting meeting in many ways. Many of the old-time leaders and warhorses, and many of the younger and more active and progressive spirits, were present, and the opposing parties were not slow to give expression to their views. I recall that convention very clearly. I remember the active spirits who took part in the proceedings; I recall Dr. Gillet, Dr. Gallaudet, Dr. Bell, Dr. Westervelt, Dr. Dobyns, W. G. Jenkins, and many others who took a lively interest in that convention—particularly Dr. Dobyns and W. G. Jenkins. W. G. Jenkins has passed beyond; Dr. Dobyns is still in the flesh, and I was in hopes that he might be here to-night. I was anxious to remind him of his great activity 30 years ago, at a similar convention in the New York institution, when he argued stoutly in opposition to Dr. Westervelt's claims, then in their infancy.

Since that convention in New York various bodies, each having for their object the educational advancement of the deaf, have sprung into existence and have actively engaged in the pursuit of the purposes for which they were called into being. As stated by Mr. Montgomery, honest differences of opinion are inevitable in

all large bodies. Sometimes they are promotive of better conditions; sometimes they have the opposite effect. Healthy competition is helpful, but acrimonious dissension is always harmful. With the lapse of time, with the passage of 30 years, and with the growth of liberal and progressive ideas as to methods of instruction, the differences of opinion in regard to the methods that then obtained have in large part happily disappeared, and we are meeting this evening in joint convention to strive to discover how best to serve the cause in which all are deeply interested; and in counseling together I am sure we shall be quite willing to sink minor differences in order that the chief purpose of our labors, the advancement, along all wise and helpful lines, in the education of the deaf, may be promoted.

We are met, I trust, as friends and coworkers. We are friends and coworkers. It is not possible that we should meet as enemies. We are met from distant lands and from all parts of the country, from overseas, from the far north, from the sunny south; and to each and to all I extend the most cordial welcome, not alone in behalf of the board of directors of this institution, so worthily represented by its distinguished president, but also in behalf of our large staff of faithful teachers and instructors, and in behalf of its numerous household and clerical officers, all of whom—I speak advisedly—you will find animated with a common desire of adding to your comfort and happiness while sojourning within our walls.

This great institution, the third oldest of its kind in America, and the largest in part of numbers and worth, now entering upon the second century of her usefulness, opens wide her doors and bids you welcome, thrice welcome, to all her departments and to all of her activities. A varied program prepared by the committee appointed to carry it into effect awaits your pleasure at each session of your meeting. In it you will find all shades of procedure connected with the instruction of deaf children represented, and well-known leaders prepared to submit papers and take part in the discussions that are to follow. Your interested attention is respectfully solicited.

Recreation and social intercourse and the needs of the inner man under the guidance of competent and faithful officials of the school have been carefully and generously provided for, and should there chance to be any lack of attention or of due regard for your comfort manifested at any time, be good enough to advise the office at once, and every effort will be made to rectify it as promptly as circumstances and conditions will permit. We have done our best to provide against every contingency, but should there arise, by reason of present labor and market conditions, any seeming lack of the most hospitable attention and service, I am sure you will be good enough to attribute it to conditions wholly beyond our control and not to any want of hospitality on our part.

I feel it proper, at this time, in order that there may arise no misunderstanding regarding the matter, to add my very great regret that notwithstanding careful personal inquiry and effort it has been found impossible, owing to lack of sufficient zone representation, by numbers, to secure reduced return-trip rates over the railroads entering Philadelphia.

That zone system as observed by the railroads extends from Buffalo down through Pittsburgh to the Ohio River; all east of that line is in the eastern zone, and by a ruling of the trunk line association, in order to secure reduced rates, 250 members from that zone were required to be present.

Another zone extends from the Ohio River on the east to the Mississippi River on the west; another on the south, one on the southwest, and one to the extreme west, and it was utterly impossible to secure the required number of delegates from each so that reduced rates might be secured for the return trip.

Effort was made to apprise you of this failure before you left your homes, advising you whenever and wherever possible to secure excursion rates with stop-over privileges to Atlantic City and New York. This, I trust, many of you have done in order to avail yourselves of the opportunity to see something of our great seaboard cities and numerous neighboring resorts, as well as to secure reduced rates on returning to your homes.

In closing, allow me once again to express my great personal pleasure in greeting you this evening, and to convey to you the most kindly felicitations of all my associates of the school staff. The occasion is yours, and I trust you will enjoy it to the fullest extent, bearing with you as you journey homeward kindly recollections of the hospitality and good will of the institution, its managers and officers and teachers.

Dr. HALL. You all had the sad news a few weeks ago of the death of Dr. Lyon, president of the American Association to Promote the Teaching of Speech to the Deaf. We had hoped to have him here with us to-night.

In response to the cordial greeting that we have received from the authorities of this institution I will ask Supt. Goodwin, of the North Carolina school, vice president of the association, to respond.

ADDRESS OF SUPT. E. McK. GOODWIN, OF THE NORTH CAROLINA SCHOOL.

Supt. GOODWIN. Mr. President, board of directors, and superintendent of the Pennsylvania school, ladies and gentlemen, some days ago Dr. Crouter, superintendent of this school, asked me if I would not take the place of Dr. Lyon on the program for this evening, and I very promptly responded that I was not equal to the occasion; that I was quite sure he could find some one who could do it more acceptably than I, but Dr. Crouter came back and said by virtue of my position as vice president of the association it was my duty. I did not want to be called a "slacker," so I am here, and you will be the loser by his not having chosen some one else.

Since I am to take Dr. Lyon's place upon the program, I feel that I should say a word of tribute to him. I presume all of you know that at one time Dr. Lyon was a teacher himself, and I think I can say he was a splendid teacher. All acts of his life proved that whatever he undertook was a success, but while he was a teacher, he had a vision and he followed that vision which led to greater things, and while he gave up the actual teaching he was perhaps worth more to the profession, to the deaf, than if he had stayed in the schoolroom, for he never lost interest in the profession and in the deaf.

While we are gathered together to-night celebrating the one hundredth anniversary of this school, I am to speak for a branch of a profession that is just about half a century old—less than that in its actual organization—the American Association for the Promotion of Teaching of Speech to the Deaf. Dr. Lyon had been a member of that association, I think, about 30 years, almost entirely since its foundation, and president of the board since 1914. While Dr. Lyon was a most successful business man, his greatest deeds do not rest in the accumulation of wealth nor his connection with big corporations, but in the hearts of the people of his city, in the hearts of the deaf of the State of New York and the citizens of Rochester.

Mr. President, while listening to the words of welcome to your institution, the thought struck me that President Montgomery was only putting into words what had been put into actual deeds for 30 years to my knowledge, the welcome and cordiality of the Pennsylvania institution. Dr. Crouter, I believe, it was in 1891 that I asked permission to bring at least a part of my board of directors to visit this institution, that they might learn—that they might emulate your example; and do you know, by the cordial reception that you gave us, the effect of it is seen in my State to-day, not only in bricks and mortar but in better work done? I recall that one leading member of my board had feared that we could not carry out the program that I had planned, but after visiting with Dr. Crouter a day or two, he said: "Double your request and we will meet it."

So the cordial reception of the Pennsylvania institution lives outside of your own State; its effects are seen in my State and I wonder if every superintendent here has not some time enjoyed that same hospitality under the roof of this institution.

There has been a sort of reciprocity among all of our institutions, and I do not know how we would exist if it were not for that reciprocity. Some of you superintendents take my teachers; I go out and get some of your teachers [laughter]. The little State of Rhode Island has come to my State for 17 teachers; I believe your State has come to mine for some 12 teachers, and just here I recall a story that I heard—I believe it took place here in Pennsylvania—haven't you a large insane asylum at Norristown?

Dr. CROUTER. Yes.

Dr. GOODWIN. A visitor appeared there once and asked to be shown through. As he went out on the campus he saw a poor man with his face buried in his hands weeping, and the visitor asked the attendant, "What is the matter with the poor man?" The only thing he could hear the man say was, "Oh, Katie, Katie, Katie," and the visitor said, "Poor man, what is the matter with you" The attendant said the man had been in love with a girl five years ago and didn't get her, and he was weeping. The visitor went a little farther and saw another man with his face buried in his hands and he, too, was weeping and crying, "Katie, Katie, Katie," and the visitor said, "Why, that is strange; there is another one crying 'Katie.' What is the matter with him?" The attendant said, "He, too, was in love with a girl five years ago and he got her." [Laughter.] Some times, Dr. Crouter, we go out looking for a teacher and almost weep because we do not get her, and sometimes we weep because we do get her. [Laughter and applause.]

I alluded to the fact that I am speaking only for the branch of the profession that has been in existence less than half a century. I recall coming through the manual department, and like a great many other young teachers I thought after I had been teaching a year or two I knew the business; when I had been teaching half a dozen years I was thoroughly convinced that I did not. Since that day, since the day of the organization of the American Association to Promote the Teaching of Speech to the Deaf, no branch of the teachers' profession has made greater strides than that of teaching the deaf, and while we recognize all methods, I believe the policy of the American schools to-day is that of pursuing the oral method.

Mr. President, I look forward to this convention being the greatest in the history of American conventions, and I am sure the pleasure will be ours. I think we can already measure the hospitality received, and we thank you for this hospitality and thank you for the privilege of coming into your splendid institution, under the distinguished superintendent that we all know and love. [Applause.]

Dr. HALL. I will now call upon Dr. N. F. Walker, superintendent of the South Carolina school, to respond to our welcome for the Convention of American Instructors of the Deaf.

ADDRESS OF DR. N. F. WALKER, OF THE SOUTH CAROLINA SCHOOL.

Dr. WALKER. Mr. President, Dr. Crouter, ladies and gentlemen, friends and coworkers, it gives me pleasure to have the honor of responding to the cordial greetings and welcome to this joint meeting of the three bodies that are here for this occasion.

I find, my friends, as I grow "younger," that I am inclined to be a little reminiscent, and I hope you will excuse me if I say that in 1870, when a mere youth, it was my privilege to represent the South Carolina school at the convention that was held in that year in Indianapolis. After my attendance upon that convention, in wending my way back home, I had the pleasure of stopping over for a few hours at the Ohio school, which, I believe, then had probably the largest number of pupils of any school in the United States.

Also on that trip it was my privilege to drop in on the old Pennsylvania school that was down town somewhere, I don't remember the location—Broad and Pine, I think—and my one time old friend, Mr. Foster, was either the head or was just getting out.

Dr. CROUTER. Getting in.

Dr. WALKER. I remember well meeting that good old worker in this land of education, and I also remember the good old matron, Miss Kirby. The superintendent and the matron of that school during vacation gave me a very hearty welcome to the Pennsylvania school. It has been my privilege and pleasure to visit the school more than once since that time, and I have always found that same cordial greeting and welcome to this school, and I am sure that it gives me great pleasure to be here on this occasion, and I beg in behalf of the convention of the teachers of the deaf of the United States and Canada to thank the official representatives of this school for the cordial welcome that they have given to us, and I am sure that we all appreciate their words of welcome.

This is not the time nor the hour for running over something of a history of the convention of teachers of the deaf of the United States.

I remember well, my friends, the meeting in New York. I was there, somewhat younger—or older—than I am now. I remember that meeting at New York. I went there expecting, as a young man, greater things than came from that meeting; but time has gone on, and the asperities, the roughness that came up in that meeting, I am sure, have gone. I shall have something to say in reference to that matter a little later in the meetings of these joint bodies.

I have lived, my friends, a good many years, and I am glad that I have lived to see this occasion, because I believe that this meeting of these joint bodies will mark a new era in the education of the deaf of the United States and Canada. [Applause.] We are all, I am sure—and have been for many years—working to the same end. We have traveled, some of us, a little different road, but we feel that we have all been honest in our opinions in the past and that the time has come in the history of this work when the cooperation of all who are interested in it should be had, and I firmly believe that that time is at hand.

Again I beg to thank the authorities of this Pennsylvania school for their welcome to this great City of Brotherly Love and to this great State of Pennsylvania, and I am sure that I voice the sentiment not only of the convention but of the other bodies that are represented here when I say that we thank you gentlemen for your welcome. [Applause.]

Dr. HALL. I will now ask Dr. Goldstein to respond for the Society of Progressive Oral Advocates.

ADDRESS OF DR. MAX A. GOLDSTEIN, OF THE CENTRAL INSTITUTE FOR THE DEAF, ST. LOUIS, MO.

Dr. GOLDSTEIN. Mr. Chairman, friends, and fellow educators, about 40 years ago I paid my first visit to the historic old city of Philadelphia. At that time lower Walnut Street was the representative residence district of Philadelphia. Ten or fifteen years later, on a subsequent visit, I was informed that the elite residence district had moved farther west to Chestnut Street, Walnut Street, and beyond. More recently Germantown, Chestnut Hills, and other suburban sections have claimed the honor of housing this residential class.

Bear with me while I finish this simile. Old, historic Walnut Street, with its many substantial dwellings, represents the American Instructors; moving westward in the evolution we find the American Association; and to-day Germantown and Chestnut Hills represent the Society of Progressive Oral Advocates. [Laughter.] Why? Because there is more freedom, more air, more verdure, and a better chance for development and expansion.

My personal acquaintance with the distinguished superintendent of the Mount Airy institution covers a period of over a quarter of a century. About 18 years ago, in Washington, we arranged a symposium in the American Laryngological Rhinological and Otological Society to discuss problems that might be mutually developed in the interest of the education of the deaf. Participants in this symposium included prominent teachers of the deaf and a number of ear, nose, and throat specialists who had given time and thought to such problems. Dr. Crouter was an active participant in this program. It was one of the first occasions at which the otolaryn-

gologist was brought in closer touch with the teacher of the deaf. The years have rolled by, and some of the ear and throat specialists have gradually been drawn closer into this splendid special educational field.

At the annual convention of the American Medical Association in New Orleans last April its authorized committee on the deaf child presented resolutions that were adopted by the otolaryngological section of this vast body and authoritatively ratified by the council of the American Medical Association. I have been officially delegated to represent this special committee of the American Medical Association at this convention. When the American Medical Association, constituting one of the greatest and most influential factors in this country for good, has once been awakened to the needs and upbuilding of the deaf, the cry of the deaf child, the appeal of the instructors of the deaf, and the call for aid of all institutions in which this noble work is projected, you will have vital and powerful influences brought to bear in assisting in the solution of your problems. You need the education of the public, you need reconstruction, you need legislation, and in all these needs we want to be your friends and your helpers. Legislators may be educated, may be persuaded, may be convinced of the necessary support required in solving many of your problems, and there is no more potent underlying influence in this country than the concerted action of the American medical profession.

I might recite a practical instance of legislative education and appeal. During the recent war I was stationed in Camp Dodge. The friends of the deaf in the city of Des Moines asked me to hear a resolution that had been prepared and which they were ready to submit to the Iowa State Legislature. The resolution was a formidable document and included an appeal to the legislators to build an independent pavilion at Council Bluffs, at the Iowa State school, for the further education of deaf children by oral methods. The deaf children of Des Moines and other large cities of Iowa had by legislative enactment been granted the opportunity of oral training until their tenth year; no provision had been made for continuing segregated oral instruction at the Iowa State school when such children in the oral classes had reached the age of 10. The petition asked for an oral pavilion. I suggested that this carefully drawn document be placed before the legislators in the nature of a personal humane appeal. "Invite the legislators to the Oral Day School for the Deaf in Des Moines and show them the work of your class of little deaf kiddies." It was the first oral class started in the State of Iowa. "That is impossible," stated several members of the committee, "the committee on education of the Iowa Legislature are not in a position to come." "Then take the kiddies to the legislators," said I. "We don't know how," said the committee. "I will take them for you," said I.

A hearing was arranged before the committee on education at the capitol building and the one oral teacher with her class of six or seven little children appeared before the joint committee on education of the house and senate; in one-half hour's demonstration as many members of both houses as could pack into the committee room were witnessing the results of this demonstration. No further

petitions seemed necessary. The chairman of the committee on education told me personally that the appropriation was a worthy one and would be allowed.

What was done in Iowa may be duplicated in any and every community in this broad land. What a splendid achievement has been that of the man whom we honor to-day and who has built up the reputation of the Mount Airy institution. He must have contended with political antagonisms, numerous handicaps, difficulties of finance, and legislative appropriations, and many other obstacles toward this final achievement, but in the course of 17 years of his superintendency and a period of over 50 years of active work in one institution, Dr. Crouter has made of this Pennsylvania State school numerically one of the largest in the world, an exclusively oral school, to my mind one of the greatest achievements of which I am cognizant in this special educational field. [Applause.] It is an example that all may emulate.

Dr. Crouter, in the name of the Society of Progressive Oral Advocates, the youngest of the national organizations represented here, I want to say that we are extremely glad to be present, to participate in the deliberations of this formidable convention, and to show all honor and respect to Mount Airy and its estimable superintendent.

Dr. HALL. We have a number of flourishing schools in Canada, and I shall call on Mr. George Bateman, principal of the Halifax institution, to say a few words of response in behalf of the Canadian schools.

ADDRESS OF MR. GEORGE BATEMAN, PRINCIPAL OF THE HALIFAX SCHOOL.

Mr. BATEMAN. Mr. Chairman, ladies, and gentlemen, I regret the absence of Dr. McDermid, who is down on the program to respond for the Canadian teachers. I regret it for myself, because it places me in the embarrassing position of responding for them on notice of a very few minutes, and I regret it on your behalf because I feel sure Dr. McDermid would have been far more able to respond for the Canadian teachers than I am able to do.

I do not know yet just how many teachers there are here from Canada, but I do know that four have come down from the Halifax School.

We in Canada feel that we owe a great deal to you American teachers; we owe a great deal to your schools; we owe a great deal to your publications; and we owe a great deal to your associations that you have in connection with the work among the deaf. We are divided from you politically only; we are all brothers and sisters engaged in the same work—that of helping the deaf and trying to minimize their handicaps as far as possible.

Mr. Chairman, I wish to say what a great pleasure it is for us to be down here. We have anticipated coming to this convention with a great deal of pleasure, and I know and feel that we are not going to be disappointed.

I thank you very much for the kind words you have said about the Canadian teachers. [Applause.]

Dr. HALL. We have a word of greeting this evening from England. A letter has been brought over by Miss Barnes, of the Hugh

Middleton School of London, from the National College of Teachers, and I will ask Miss Barnes to please come forward and read that letter of greeting.

Miss BARNES. This is a letter from Mr. Story, chairman of the National College of Teachers of the Deaf in England:

BLIND AND DEAF SCHOOL,
THE MOUNT,
Stoke-on-Trent, May 25, 1920.

DEAR MISS BARNES: May I ask you as a member of the N. C. T. D. to convey to the convention of American teachers at Mount Airy on June 28 next, the fraternal greetings of the N. C. T. D. and assure the convention of the great interest felt by British teachers in the magnificent work being done by American teachers in the interests of the deaf. Will you please tell them how closely many of us on this side of the Atlantic follow the literature of the American branch of the profession and how deeply interested we are in the many movements now in progress in that country. I feel sure that only distance prevents many British teachers from being present at the convention, but fortunately distance is no barrier to the expression of our good will and our sense of brotherhood in a sacred cause with those teachers in America who are struggling to serve the same end, and therefore, as chairman of the National College of Teachers of the Deaf, I ask you to convey to everybody present at Mount Airy the expression of our fraternal regard and our best wishes for the success of the deliberations of the conference and for the future of the work for the deaf in the great continent of America.

Yours, sincerely,

A. J. STORY,
Chairman N. C. T. D.

Dr. HALL. I wish to read at this time a telegram from Dr. Dobyns, whose name has been mentioned this evening as one of those who attended a good many years ago that meeting in the New York school:

When the roll is called this evening, please have me marked present in spirit. My heart is at Mount Airy and my ears are turned to San Francisco. [Laughter.] I hope the Democrats in convention will be as faithful to their work as I know the teachers assembled at Mount Airy will be to theirs.

Arkansas sorrows with you in the loss of President Edmund Lyon.

J. R. DOBYNS.

Our program for the week is very full. There are a number of business meetings to be held and other meetings in connection with the educational side. This evening there will be a number of announcements in connection with business matters, in order to start the machinery necessary to carry on all of the work of the various conventions and associations. First, I am going to announce the appointment of a number of committees of the Convention of American Instructors of the Deaf, which has its business meeting on Wednesday morning:

Auditing committee.—Dr. Charles R. Ely and Mr. Otis A. Betts.

Committee on Necrology.—Dr. J. H Cloud, Mr Arthur Roberts, and Mr. G. S. Porter.

Committee on Interpreters.—Dr. J. S Long, Mr. J. A. McIlvaine, and Miss Edith Fitzgerald.

Committee on Resolutions.—Dr. Augustus Rogers, F. M. Driggs, Miss Musa Marbut, Miss Mabel E. Adams, and Mr. T. C. Forrester.

Nominating Committee.—Mr. J. W. Jones, Miss Carolyne A. Yale, Dr. A. H. Walker, Mr. E. A. Gruver, and Mr. Ignatius Bjorlee.

I will call attention to the fact that those who are enjoying the hospitality of this institution should become members of one of the organizations which is meeting here. I do not know the exact rules in regard to joining the two other associations, but the rules governing

the payment of dues and membership, etc., of the convention are briefly as follows:

Those that have kept up their dues are expected to pay at this meeting simply a registration fee of $1; those who join for the first time a fee of $3 besides, which covers the dues for the first year and the initiation fee.

Dr. Long will be in the hallway downstairs to-morrow morning and for several mornings and at various other times to meet those who wish to join the Convention of American Instructors of the Deaf.

I will call for an executive committee meeting of the convention to-morrow evening at 7 o'clock in the directors' room on the floor below. The members present, as I understand, are Messrs. Driggs, Long, Jones, Gruver, and Dr. N. F. Walker.

I believe that Dr. Crouter has some announcements to make in regard to the program and the domestic arrangements, which you will be glad to hear.

Dr. CROUTER. I wish in the first place to call your attention to the demonstrations that are to take place every morning, beginning with Tuesday and continuing Wednesday and Thursday. You will find the program on the bulletin board in the hall, but you will have to read it over carefully to sense just what is said.

From 8.45 to 9.30 in Cresheim Hall there will be a demonstration in speech development by Miss Haeseler.

During the same time there will be a demonstration in Wingohocking Hall in lip reading for adults, conducted by Mrs. Nitchie, of New York.

Those demonstrations in each case will be held in the chapel, the chapels of the different halls, and if you wish to attend speech development under Miss Haeseler you will proceed to Cresheim Hall in the morning for the session which is held from 8.45 to 9.30; if you wish to attend the demonstration in lip reading for adults by Mrs. Nitchie you will go to Wingohocking Hall, and if you wish to attend a further demonstration in speech development you will proceed to Wissinoming Hall where Miss Grace Wright of the Newark day school will conduct the exercises. So much for that period.

Now, for the period from 9.30 to 10.20 there is a demonstration in auricular work by Miss Berry, of the New York Institution, in Cresheim Hall; a demonstration in rythmic training by Miss Thomason, in Wingohocking Hall; and a demonstration in lip reading for adults in Wissinoming Hall by Miss Bruhn.

During the period from 10.20 to 11.15 there will be a demonstration in Cresheim Hall in primary language by Miss Jones, of the New York Day School. In Wingohocking Hall there will be a demonstration in lip reading for adults conducted by Miss Connery, of St. Louis, and a lip-reading demonstration for adults in Wissinoming Hall during the same period conducted by Miss Kinzie, of Philadelphia.

Now, to my mind, that is perfectly clear, but I don't know whether I have succeeded in impressing on your mind when and where these demonstrations are to be held. [Laughter.] I hope you will avail yourselves of the opportunity to attend each and all of them.

Further, in the directors' parlor, from 10.25 to 11.15 on Tuesday, Wednesday, and Thursday there will be a demonstration in lip reading for beginners, not for adults, by Miss Reinhardt.

On Wednesday, June 30, there will be a demonstration in speech development in Cresheim Hall by Miss Bockeus, not by Miss Haeseler—Miss Haeseler comes to-morrow—and another on Thursday on the same subject conducted by Miss Evans at the same time.

Miss Fuller, for many years a member of the American Association, sends cordial felicitations and best regards and best wishes for the success of this convention. I am sure you all remember and respect most highly Miss Fuller. [Applause.]

I think that is all of the announcements that I have to make to-night.

Dr. HALL. There are several committees, one representing the conference of superintendents and principals, one representing the Society of Progressive Oral Advocates, one representing the convention, and, I believe, one representing the association, which desire to take up at this time the question of approaching one of the educational foundations, in regard to the possibility of investigating and standardizing certain methods in connection with our schools for the deaf. Dr. Goldstein asked me to call a meeting of those committees to-morrow morning at half past 10 in Mr. Steed's schoolroom in the school building, connected with this department.

Mr. Steed has some announcements to make to you to-night before we adjourn, in regard to various matters pertaining to our entertainment.

Mr. STEED. The committee on entertainment has prepared a small leaflet which will give points of historic interest in and near Philadelphia. I hope that you will call for these at the bureau of information. This leaflet will give you all of the information concerning the trips planned.

On Monday, Thursday, and Friday nights we will have an orchestra here, and all those who enjoy dancing will please partake of what we have to offer in the dining room below.

If any of you like to play cards, Miss Thompson, one of our staff, will have charge of that, and we will be very glad to provide tables and partners for you.

We hope to have moving pictures out on the campus Tuesday, Wednesday, and Thursday nights, showing the kind of pictures we give our children. The movies will begin about 9.15 p. m.

Dr. HALL. Before adjourning, Dr. Crouter asks me to call your attention to the fact that there will be an informal reception and refreshments on the floor below in the hallway and sitting rooms adjoining the main hallway below at the conclusion of the meeting.

If there is no further business, the meeting is adjourned.

(Whereupon, at 9.20 o'clock p. m., the meeting adjourned.)

SECOND DAY, TUESDAY, JUNE 29, 1920.

PROGRAM.

8.45 to 9.30 a. m.:

Demonstration and discussion on—

(1) Speech development, and (2) voice training, under the direction of Dr. Caroline A. Yale, principal of the Clarke School, Northampton, Mass.

(3) Lip reading for adults, under the direction of Mrs. Edward B. Nitchie, of New York.

9.30 to 10.20 a. m.:
Demonstration and discussion on—
(1) Auricular work, under the direction of Miss Amelia Berry, of the New York Institution.
(2) Rhythmic training, under direction of Miss Pattie Thomason, of the North Carolina School.
(3) Lip reading for adults, under the direction of Miss Martha E. Bruhn, of Boston.
10.25 to 11.15 a. m.:
Demonstration and discussion on—
(1) Lip reading for beginners as a means of mental development, under direction of Miss Anna C. Reinhardt, principal Home School, Kensington, Md.
(2) Language development for primary grades, under direction of Miss Mabel K. Jones, of the New York Day School.
(3) Lip reading for the adult deaf, under the direction of Miss Cora Elsie Kinzie, of Philadelphia, and Miss Julia Connery, of the Central Institute, St. Louis.
11.20 a. m. to 12.20 p. m.:
Joint session, Mr. E. McKay Goodwin presiding.
Papers on "Use of English in Schools for the Deaf," by Dr. N. F. Walker, of the South Carolina School, and Supt. Frank M. Driggs, of the Utah School. Discussion by Mr. A. L. Roberts, of the Kendall School; Miss J. E. Willoughby, of the Clarke School, Northampton; and Mr. A. C. Manning, of the Western Pennsylvania School.
2 to 4.30 p. m.:
Dr. Edwin LaCrosse presiding.
(1) Paper on "Language for Advanced Grades," by Supt. J. W. Jones, of the Ohio School. Discussion by Mr. Francis H. E. O'Donnell, of the California School, and Mr. James A. Weaver, of the Mount Airy School,
(2) Paper on "Teaching of Geography," by Miss Grace Beattie, of the Colorado School. Discussion led by Mr. Lyman Steed, of the Mount Airy School.
(3) Paper on "History Teaching," by Dr. J. Schuyler Long, of the Iowa School. Discussion by Miss Mabel E. Adams, of the Horace Mann School, Boston.
4.30 to 6.30 p. m.:
Excursions.
8 to 9.30 p. m.:
Dr. Caroline Yale presiding.
Addresses by Dr. Max Goldstein and Dr. John D. Wright on "Auricular Training." Discussion by Mrs. E. G. Hurd, of the Rhode Island School; Mr. E. A. Stevenson, of the Kansas School; and Mr. Ignatius Bjorlee, principal of the Maryland School for the Deaf.
10 p. m. to 12 p. m.:
Cards and dancing.

MORNING SESSION.

The convention reassembled at 11.20 o'clock a. m., Dr. E. McK. Goodwin presiding.

Dr. GOODWIN. The first thing on the program this morning is a paper by Dr. N. F. Walker. While we are getting ready for the reading of this paper there are some announcements to be made, and those of you who have the announcements in printed form will please read them. It is very important that you get them if you are to enjoy and get the most out of this convention.

Dr. HALL. Mr. Chairman, there are several announcements to be made. In the first place, I would like to say that there is probably a number of teachers and superintendents who may not know the results of the entrance examinations of their candidates for Gallaudet College. I am going to ask our registrar to be downstairs in the bureau of information from 12.30 to 2 o'clock with the results of

examinations for admission of candidates to the college. Anyone interested may apply down there this afternoon.

The committee on interpreters has selected Miss Herdman, Mr. Stevenson, Mr. Lloyd, Miss Coleman, Miss Peet, A. H. Walker, Dr. Ely, Mr. Driggs, Mr. Booth, and Mrs. Temple to act. I hope that a number of them will be here to take turns interpreting.

Dr. Argo has sent the following telegram which I would like to read:

Please give my love to the convention, especially the female part [laughter], also my good wishes. Remember that a very wise old guy advises us to prove all things and to hold fast that which is good. [Applause.]

I would like to call your attention again to the meeting of the executive committee of the convention at 7 o'clock to-night in the directors' room, and to the business meeting of the convention to-morrow at 11.20 in this room. At that business meeting I hope the committee on nominations, the committee on audit, and the committee on necrology will have something to say.

The committee on resolutions will probably report at the end of our meeting on Saturday.

All of those who are in attendance here, as was announced yesterday, should be members of one of the associations. They are not entitled to the special rates provided here by the institution unless they are members of one of the organizations.

Dr. CROUTER. The council of the day-school teachers will meet immediately after luncheon in the writing room, Wissinoming Hall, rear wing, girls' side.

I have a letter here from Mr. Warren Robinson, of the Wisconsin school, which, with your permission, Mr. President, I will read:

SUPERINTENDENT'S OFFICE,
WISCONSIN SCHOOL FOR THE DEAF,
Delavan, Wis., June 25, 1920.

THE PRESIDING OFFICER, CONVENTION AND SPEECH ASSOCIATION,
Mount Airy, Philadelphia, Pa.

GREETING: It is hard for me to find words to adequately express my pleasure and satisfaction at this first coming together of the convention and association. "United we stand, divided we fall" or fail, whichever way you desire to interpret it.

Great as the past has been, it is my hope and prayer that this meeting means the ushering in of a still greater and more glorious era for the profession and the education of the deaf in America in particular and of the world in general.

Deeply regretting that I can not be with you on this most auspicious occasion, I wish everyone a most pleasant and profitable time.

Fraternally, yours,

WARREN ROBINSON.

I also have a dispatch from Dr. John D. Wright, of the Wright Oral School. Dr. Taylor, as you perhaps know, is detained by reason of illness, very serious illness. Otherwise he would be here.

This is a dispatch from Mr. Wright, dated at San Francisco:

SAN FRANCISCO, CALIF., *June 27, 1920.*

Dr. A. L. E. CROUTER,
Pennsylvania Institution for the Deaf, Mount Airy, Philadelphia, Pa.:

Though circumstances and distance have deprived me of the anticipated satisfaction of attending the great joint meeting, I wish to send my greetings and express my deep interest in its success. It typifies the hearty spirit of cooperative effort on behalf of the deaf that actuates all organizations of those

engaged in their education. I have no doubt that at some point in your exercises pause will be given to remember and to speak of the big-hearted, level-headed man whose unexpected death has deprived the deaf of a powerful and devoted friend and the American association of its honored and trusted president. I wish to add my word of admiration and respect for the intellect, the business sagacity, and the genial personality of Edmund Lyon, who gave so generously and ungrudgingly, not only his money but that which was more valuable, his time and thought, to improve the educational advantages open to the deaf. His memory will never fade in the hearts of those who were honored with his friendship.

JOHN D. WRIGHT.

I have also a communication from Dr. Harris Taylor, which will be entered upon the minutes.

DEXTER, ME., *June 28, 1920.*

Dr. A. L. E. CROUTER,
Wissinoming Hall, Mount Airy, Philadelphia, Pa.:

My best wishes for successful meeting of the association and the convention. Wish I were there to have the inspiration and happiness of meeting the great and good men of the profession. God bless Pennsylvania institution and its superintendent.

HARRIS TAYLOR,
Packards Camp, Lake Sebec, Me.

Dr. GOODWIN. The subject this morning is "Use of English in Schools for the Deaf." To my mind this should be the key topic of every school for the deaf and every teacher of the deaf in America, regardless of method or combinations of methods. The teacher is a failure who does not get good English, be she a speech teacher or a manual teacher. If she does not get English, she is a failure, and the better English they get the better teachers they are.

Dr. N. F. Walker, superintendent of the South Carolina school, will now give a paper upon that subject.

USE OF ENGLISH IN SCHOOLS FOR THE DEAF.

By Dr. N. F. WALKER.

I consider myself fortunate this morning in being permitted to address this assembly of educators—this joint meeting of the convention, the association, and the progressive oral advocates, and especially fortunate because my subject is "Use of English in Schools for the Deaf."

I feel that I have the consent of this body of specialists in educational work to prologue as it were my address with a short introduction, a part of which must be personal.

The sight before me at this moment is one that I have longed for years to see. This meeting argues more for the future betterment of the deaf of America than any other that has ever been held. We have all finally realized that we are working for the same child and that each is sincere in his desire to lift to their rightful heritage these children who walk in the valley of the shadow of silence.

The American sense of justice and her deep-rooted consciousness of democracy, aided by her inventive genius, have caused us to become leaders in the education of the deaf. Where 100 years ago we were begging Germany and France to initiate us into the mystery of the science of the education of the deaf to-day we are consciously and acknowledgedly the leaders in this field of special education. I call this fact to your minds in order that we may be stirred to greater activity, broader endeavor, and fields of larger usefulness, and certainly this meeting prophesies activity along these lines. The results that have been gained are but the evidence of the things to come.

More than 10 years ago we said publicly these words: "Let's have an organization based upon an English platform and let's meet and discuss which is the better visual presentation, the labial or the manual. This organization would have to do two things—two different things. First, it would have to convince the oralists that it was not antagonistic to oral presentation; second, it would

have to convice the deaf that it was not antagonistic to the sign language outside of the preserves of the school.

"We are hungry for a free discussion by the educators of the deaf upon those questions that have to do with the physical, mental, and moral life of those children for whom, in a great measure, we are responsible."

Many of us have been hungry for a long time but the feeding hour has arrived and the feast is both inviting and bountiful.

There is no subject connected with our work that is as old or about which as much has been written. Look back over the literature of our profession and you will see that this has been the battle ground of the leaders from the very beginning. While there has been some muddying of the waters by thinkers of the second magnitude, still the leaders have been clear upon the subject now before us for consideration. I shall quote you presently along this line from those whose judgment we dare not dispute; quote you from the leaders who have led us, by diverging routes, back together upon this exalted plane of accomplishment.

But there is one idea which we should fully grasp before we proceed further. And that is the great importance of having our graduates so familiar with the English language that they can make it their medium of thought. The acquiring of the English language by our deaf boys and girls is not the gaining of an accomplishment—it is the gaining of that which is fundamental to their furture happiness.

I feel that my long connection with the deaf and my devotion to their cause gives me the right to say what immediately follows. Those deaf who make English their medium of thought are less peculiar and less suspicious than those who do not; there are exceptions which prove the rule but the rule holds. They have the viewpoint more largely of the great mass of people among whom they must live. Thus equipped, they move more easily in business and social circles and are therefore more succesful. They are broader in their vision, happier in their judgment, and more stable in their citizenship. Is not then the giving of English to our deaf children a most important question? It is one that lies close to my heart, because herein is character better made and God more clearly revealed.

To return to my quotations, Edward M. Gallaudet said:

"Teachers and officers use signs far too freely; pupils are allowed to use them long after they might employ the finger alphabet in many of their communications.

"In how many of our schools are teachers in the habit of communicating by manual spelling new facts, in the shape of miniature lectures, couched in language they are sure their pupils can comprehend? How often are pupils assembled in pleasant social gatherings wherein all conversation is required to be in finger spelling? How general is the rule that all favors of the principal, asked by the pupils of over three years' standing, must be asked in correctly spelled language or be denied? How often is the brake of dactylology applied to that well known, ever-moving propensity to talk in the schoolroom? Is it not true in a great majority of cases the actual use by the pupil of the forms of his vernacular is confined to the hours of school and study, and that here even signs are largely employed at times when they might be largely dispensed with? When speaking children are sent to French or German schools for acquiring languages spoken by the teachers of those schools, are they not expected, after a short time, to make the new language the media of communication with all around them? Why then should not the case be so with the deaf and dumb? In coming to our institutions the learning of the sign language is not their most important work. Their lives are not, in a majority of cases, to be passed among deaf-mutes but in association with speaking people, and their great object is to acquire a means of communicating accurately with the world in general. The failure to do this, manifest in too many of the graduates of our institutions, stands forth as the gravest practical defect of our system, and is largely attributable, in the opinion of the writer, to the cause just recited, which may so readily be removed."

Dr. Alexander Graham Bell recently said:

"It gives me pleasure to comply with your request; and I may say, after examining your resolutions, that we differ chiefly upon one point—the use of the sign language in the instruction of the young. You advocate its use, and I do not; and that is the chief point of difference between us.

"I have nothing to urge against the use of this language by adult deaf persons in talking to one another if they so desire. That is a matter which con-

cerns themselves alone; and they are certainly entitled to employ any language that they may prefer.

"My objections relate chiefly to the use of the language in the instruction of the young; and I look at the matter from the standpoint of a teacher pledged to do his best for the little pupils intrusted to his care.

"One thing is certain: Our pupils come to us to learn English, not the sign language, and one great object of their education is to enable them to communicate with the people at home, and with the world of hearing and speaking people around them.

"It is therefore our duty, as instructors of the deaf, to teach our pupils to use the English language as freely as possible. It is our duty to teach them to read and write; and to speak and understand spoken utterances by watching the mouth. It is our duty to make the English language the vernacular of the deaf child, so that he shall think in English and become as like the hearing child in every particular as the necessities of his case admit.

"Whether we use spoken English, or written English, or English spelled upon the fingers, as our usual means of communication, is a matter of quite secondary importance to the language itself; for these are all forms of one and the same language, English."

The following resolution proposed at the Ogden convention but ruled out as being contrary to the constitution of that body puts in succinct form the ideas supported by the late Edward M. Gallaudet and by Dr. Bell:

"*Resolved*, That the English language be made the sole medium of communication in the graded schoolroom by authority, if necessary; outside the schoolroom by sentiment."

If we can agree with the statements of our leaders and with the thought as expressed in the above resolution, and to-day we can, we have advanced to that point where divergence need no longer be bitter or partisan.

That resolution was the product of years of thought and study. When we take the position as educators of the deaf that English should be the sole medium of communication in the graded schoolrooms, we are not abridging the right of anyone to use "any method for good results." As educators of the deaf we must give our children that heritage of which nature has attempted to rob them.

There are a few children in our schools for the deaf—certainly in those States which have no schools for the backward children—who can never, owing to lack of mental ability, grasp a working command of English; and therefore can never be educated in the common acceptance of that term. But they can be taught the common facts of life by means of the sign language, aided by pantomime. Therefore we say and should say in the "ungraded" classroom, which every school has, there should be permitted the use of that which is necessary.

Those of us who are experts in the sign language know that ideas, which are not complex, can be conveyed more rapidly and more effectively by means of the sign language than by means of the English language. And there is one field where I would put the acquiring of ideas beyond the gaining of language. I would not stunt the growth of a child toward God for all theories and for all languages. The craving of a soul for knowledge of its Maker must be met instantly, constantly, and in the most practical way. In religious instruction the language question, elsewhere the most important question, must not be considered; it fades into nothingness.

Having shown the great importance of English in our schools for the deaf, and having shown that the leaders in our profession have always been united in their demand that we teach our children to use it as their medium of thought, we come to the practical problem of how to accomplish this greatly desired result.

If we will keep in our minds that the deaf are foreigners, from a language standpoint, and apply this knowledge, we will have little trouble in arriving at a practical and proper solution of the question. If you doubt that the deaf are translating when they write English, compare their work with that of a normal child attempting a French composition. Watch your boys on the playground and see in what language they express their strong feelings and sudden emotions. The only difference between a deaf child learning English and a normal child learning French is that the latter has his language cells developed, while the former has not; but this is a question that involves extension of time and not a change of method.

We know how inefficiently French and other languages are taught in our private and public schools and probably it is just as well that it is thus, for we are not trying to make French citizens. But with the deaf the question is different. We are trying to make American citizens and we are not doing our duty by them unless we teach them to think in English. The question of methods should not enter into this question. But in passing let me make a few plain statements on methods.

I believe every one in this audience will subscribe to what I am now about to say. If we could teach every deaf child to speak intelligently and read lips to a practical degree, then the question of methods would be settled. The power to speak and the ability to mingle in business and social life with the great mass of people is the greatest live asset we can put in the hands of our children. Once more: If we can teach a few of our children to speak intelligibly and read lips to a practical degree, we should give every one a full and complete tryout to select these few. It would be easy to settle then the question of methods. But if all deaf children can not be taught this difficult art, and if there is another method by which they can be educated, then it is our plain duty to educate—lead them out—along the other road. And the question of methods settles itself.

But along every road they should see and use nothing but English—they should read it, speak it, spell it, and write it. Please bear in mind that we are speaking about the children in the school. Let me repeat this idea, in order that there may be no misunderstanding; after a deaf child has learned to think in English it should acquire as many languages as is possible; every additional one will broaden him.

A misconception of the true method of language acquisition, supplemented by the fact that deaf children orally taught are necessarily cramped in their beginning years, has led to the introduction of many artificial methods of language teaching; all of which are more or less harmful. They are a reflection on the wisdom and ingenuity of those who use them.

English is one of the last things that we would teach the children in our schools, and we usually make it the very first. We think because the child has no language that we should start our work with this branch, forgetting that language can not be taught; it must be learned. We should begin teaching our children reading, arithmetic, and spelling in order that they may learn language—the one language that they must learn—English. Every lesson from the very beginning—from the day you teach the first number combination or word—must be the introduction of activity in order that there may be a demand for language. Every language is the product of a necessity; the language of a tribe or a nation is in direct proportion to its civilization. The tribes of Africa have no need for, nor can they use the complex language of a civilized nation; nor could we conduct our life with their simple dialect. There must be a demand created in our schools for language. We must then take advantage of this demand and give them the language that they have a right to know as their "mother tongue."

Dr. GOODWIN. Following this paper by Dr. Walker, Superintendent Driggs, of the Utah School, will now present a paper on the same subject.

THE USE OF ENGLISH IN SCHOOLS FOR THE DEAF.

By FRANK M. DRIGGS.

That English is the most important subject of the curriculum, all will agree. That the study of English by the deaf presents most serious difficulties, none will deny. That most of our pupils do not know English and do not understand how to use it well, is common knowledge. To give our boys and girls the key which unlocks the door of language may seem easy, but to give them a working, usable vocabulary, a language house in apple-pie order, is a most vexing problem.

English should be the foundation, the corner stone, the "open sesame," of all studies. Poorly taught and little understood, it becomes a most annoying handicap and makes progress throughout the course slow and unsatisfactory. Understood and well used, it opens the gate to knowledge, makes study "good fun," and brings real advancement and happiness.

"Our language will be most effectively taught only as it is taught from the living viewpoint—taught not for the sake of itself but rather for the sake of service, and taught by truly democratic methods."

My purpose in this brief paper is not to present a plan for the study of English, neither shall I submit a recipe designed to cure all the ills found in the use of English in our schools for the deaf. My only hope is to mention a few faults, or handicaps, and to suggest some remedies.

The most serious fault in the use of English in our schools for the deaf is the nonuse of English as a means of communication. Too many of us resort to the sign language, the easy method, rather than use spoken, written, or spelled English. If our deaf children are ever to learn to walk, they must walk, and walk, and walk. If they are ever to learn to speak, they must speak, and speak, and speak. If they are ever to learn how to use good English, they must use, and use, and use good English. They must be surrounded by and breathe an English atmosphere—first, last, and always. Signs surely "befog" the English atmosphere and are not conducive to the constant use of our mother tongue.

The second fault is that there is too much canned, or preserved, rather than live, growing, pulsating language; too much language that has been put up in books by some one else rather than that picked, eaten, and digested by the children themselves—their own living language. The greatest need of all our children in learning how to use English is to use English that deals with child life, that is humanized and vitalized.

Do not all of us find more genuine pleasure and profit in stories full of life, with the personal or human side well emphasized, than we do when those elements are withheld? The public speaker who holds your attention best catches and entrances you with a live anecdote or illustration.

The third fault is that we imitate more than we create. We copy more than we invent. We use materials already prepared for us instead of producing the stuff we need to use. It may seem an easier way, but the results are less satisfying in the end. "There is no royal road" to the use of English. For the love of your pupils, for the joy of accomplishment, give, and give freely, the opportunity to create. It may require greater effort, but effort educates those who put forth the energy to create.

"Too many teachers, in dealing with this central subject of the curriculum, still persist in entering the future with their faces toward the past. They teach our language as something fixed, static. They spend practically all of their time in informing pupils about language, and in having them imitate classic models in composition, instead of training them effectively to express themselves in the language of the living present. Language is not something static; it is dynamic. It lives and grows. It is ever changing to reflect and shape the changing thoughts and feelings of the people who create it. It breathes their spirit; it is the chief medium through which their individual and social action is directed. * * * To teach language successfully means far more than to drill pupils on symbols and facts of speech. It means rather to train them in a discriminating use of their common tongue, to help them find therein the clean, live, usable words, and to shape out of these words clear, convincing sentences to convey to others their own thoughts and feelings."

The fourth fault is suppression rather than expression. There can be no education without expression.

"The school too often is made an institution of repression and suppression rather than of expression. The schoolmaster, with the best of intention, tries to train up a child in the way he should go by the use of autocratic methods. The result is that spontaneity, initiative, and originality, the most desirable of qualities to be cultivated in the human being, are choked and thwarted. The pupil's natural growth is prevented rather than promoted."

Some one has said that a child's conception of the world outside is that it is a great spider web of sick adult nerves, touching the threads of which brings forth such commands as "Stop! Sit still! Be quiet! Don't do that! Shut up! Go to sleep!"

If permitted to grow and develop, children bubble over, ask innumerable questions in the quest for information, tell of their little childish experiences, and express what is pent up in their hearts to say. If suppressed, they hesitate, stumble, close up, and become hard, inattentive, inactive, dead.

This brings to mind a story I once heard a prominent educator tell:

"A number of boys were tramping through the woods when they spied a terrapin, or land turtle. Thinking to have some fun with the plodding creature, they poked at it with a stick. Immediately the terrapin pulled head, tail, and

legs under its shell. Desiring to see these wiggly parts and anxious to see the terrapin move along, the boys struck the poor creature on the back, threw stones at it, and kicked it. It did not move. Finally, as they were about to build a fire and heap hot coals upon its back, an elderly man approached. He was told of their plan to make Mr. Terrapin move, and suggested that they step aside and use a jew's-harp. 'Music hath charms to accomplish your desires,' said he. The suggestion met with favor. Then, when all was still, the terrapin moved on its way to the strains of music."

We need music in our lives almost as much as we need our daily bread. Our pupils crave the chance to express themselves. They want to walk. They desire to talk. They love to play. They wish to live and grow and develop. Give them, I beg of you, every opportunity to come out of their shells.

"To create conditions wherein the pupil feels impelled—not compelled—to express himself is the essential first step toward success in language teaching. Two things are necessary to get this spontaneous self-expression:

1. A subject that connects vitally with the life of the learner. 2. Natural stimulus through question and suggestion.

Sometimes mere mention of the subject is sufficient to start the pupils talking. The work of the teacher then is simply that of directing expression along desired lines. At other times this lead is not enough; pupils must be given suggestions and helps to be induced to express themselves freely.

"Five general ways offer themselves as aids to the teacher here: 1. Personal experiences. 2. Suggestive questions and topics. 3. Literature close to child life. 4. Pictures and objects. 5. Field trips and other activities."

Of these five ways, personal experiences are generally most effective. The great out of doors should not be forgotten. The home, the farm, the store, the factory, and the shop are of unusual interest. The school itself teems with many lessons well worth time and attention.

The fifth fault is our insistent demand for similarity rather than individuality. One of the saddest errors in education is that we plan, build, and equip our schools and lay our courses of study in the hope that Johnny Jones and Harry Smith and Bessie Brown shall enter on the same day, sit in the same-sized seats, pursue the same course of study, and finally emerge commencement day, all of them, the perfect graduates we thought they would be. Too many lessons are given with the hope that all these children will prepare them equally well, have the same understanding of all the problems, or answer every question in the exact language of the author, parrotlike, booklike, all alike. How much more sensible it would be to develop individuality, initiative, and competition; to let each pupil present his views of the lesson or give his own version.

The sixth fault is that there is given altogether too much help by the teacher. The pupil is too often assisted when he should be allowed to help himself. It is inspiration, guidance, advice, and leadership that pupils need—not assistance.

The seventh fault is the lack of cooperation in the teaching and use of English by all the teachers of all schools. If English is the important element of success in the curriculum that we think it is, then it should be so regarded by every teacher in the school and in the shop, by every matron and every supervisor everywhere and at all times.

The use of good English as the means of communication in school and out of school should be expected, even demanded, of everybody.

"Teachers do not seem to feel keenly this truth. They try to impress facts upon the child's mind instead of giving him a chance to impress the facts upon himself by expressing them in plain language. This is true not only in science but also in arithmetic, in geography, in history, and in all the other subjects of the curriculum. By their actions, if not by their words, many teachers are constantly saying, 'That pupil's language is no concern of mine. That work belongs to the teacher of language.' The idea is a faulty, false one. Language is the common currency of thought. Without its help the mental business of the recitation could not be transacted. That teacher is poor, indeed, who does not possess enough of this common medium of exchange between mind and mind to conduct the affairs of the class with facility. The pupil, too, is robbed of the richest the recitation class can bring unless he is given opportunity to clarify his thoughts by expressing them clearly."

Failure to apply this truth in all classes accounts largely for both the careless speech and the careless thought habits too prevalent in our schools. Permitting pupils to use lax language in any recitation tends to develop lazy thinkers.

"Rightly taught, every subject makes its distinctive contribution indirectly to language training. The part of every teacher is to make sure that the speech side of the subject is not forgotten. On the English department rests the responsibility for teaching the essential principles of language and giving the necessary practice and drills to make these principles sure; but on all teachers rests the general responsibility for holding the pupils to clear and correct speech.

"Such teamwork will bring the results we seek. When a hunter goes after rabbits or ducks he takes a shotgun; if he hunts big game, he carries a rifle. There is just as much lead used in a shotgun as in a rifle, but the lead used in the rifle works as a unit. Language training in our schools has been too much of the shotgun type. The school has not been united in the achievement of this common purpose. As a consequence, much of the excellent work of individual teachers has been wasted. The call of the hour is for cooperation, for unity of effort in promoting this common cause."

That there are other faults goes without saying. Seek and you will discover them. Clarify the misty atmosphere and sunshine will light the pathway to a better understanding of English and its use in our schools for the deaf.

In conclusion, permit me to say that I have quoted generously from my brother's books, "Our Living Language" and "Live Language Lessons," from which books the teachers of the Utah school are daily gleaning inspiration and valuable suggestion. Book 1 of his "Live Language Lessons" series for the third and fourth grades contains many wonderful language games easily adapted for our deaf children. These books may be secured from the University Publishing Co., Lincoln, Nebr. Sample copies may be found in the boys' sitting room, first floor, this building.

Finally, may I hold you a few minutes longer and read a few short live language lessons written for this occasion by the boys and girls of the "special class" of the Utah school? Other and more pretentious creations you may read in our school paper, the Utah Eagle, copies of which may be found in the boys' reading room.

I may say that this special class consists of about 10 pupils, varying in age from 12 to 20 years. They have been in school all the way from four to a dozen years, I presume, and they are the slow, poky boys and girls of our institution. I think they would compare very well with the third, fourth, and fifth grades of the regular classes.

The first story is the teacher's story, which she writes upon the blackboard:

"Going fishing: When I was a little girl my brother Harry and I went fishing one day. We had rods and lines and we took some worms in a can. We went to the creek. I was afraid of the worms, and Harry put my worm on my hook for me. Then we fished. In a little while I caught a very small fish. Harry put it on a forked stick. Then he caught a large eel. It jumped and wriggled on the hook, but it could not get off. He took it off and put it on the forged stick. Then we ran to the house and showed it to our mother. Harry cleaned it and a Negro woman cooked it for supper."

Two of the stories of the special class:

"Going fishing: A few years ago my brother and I went fishing. We took some worms in a can and we went to the river. We baited our hooks with the worms and dropped them into the water. My brother caught a rather large fish, but it fell back down in the water. He wanted to get it, but it swam away. We caught some more fish and put them on a forked stick. Then we saw a game warden coming on a horse. I put the fish behind a tree and we waited for him to pass. We did not have a permit to fish, and we were afraid that he would tell us to go home. He went by us and went down the river. Then we caught a few more fish. The forked stick was full, and we went home. We showed the fish to our mother, and she was surprised to see them. She cooked them and we ate them and some other things for dinner.

"DON ROBINSON."

"Going fishing: Last summer I went fishing with some boys. We did not have any rods. We wanted to catch a large fish with our hands. We went to a river near Salt Lake City. We pulled off our shoes and stockings and rolled up our pants. Then we waded in the water. Some large fish swam by my feet. I felt them against my legs. I tried to catch a few of them. After awhile I caught one fish. I put it in a bag. In a little while one of the boys fell in the water. We laughed at him. His clothes were wet and he was cold.

He shivered and his teeth chattered. The other boys had a few fish, and we took them and went home. That afternoon I cleaned my fish and gave it to mother. She cooked it for dinner the next day.

"EDWIN JACKSON."

Dr. GOODWIN. You doubtless have the program before you. There are three other papers to be presented at this session. Mr. A. L. Roberts, of the Kendall School, is first on the program for discussion.

Mr. ROBERTS. Mr. Chairman, ladies, and gentlemen, my good friends who have just spoken have set forth far better than I can ever hope to do the methods by which we may English the young. I have every respect for their experience and wisdom. They have presented the case for the affirmative so well that they haven't left me anything to say for the prosecution. I think that if I hope to say anything I must go over to the side of the defense. I am not going to quarrel with them if I can help it. I do not wish to cast a discordant note into this convention, which I hope will be a love feast.

In dealing with this subject, I wish to express a few of my humble opinions.

In this business of educating the deaf I think the tendency is to devise rules of procedure. But in devising rules and blindly hewing to the line may we not sometimes retard rather than promote advancement?

However important English is in the scheme of things, it is not the all of education. We must not forget that.

I admit that the language of the average deaf person of average mentality is not all that could be desired. But what of the average hearing person of average mentality? Is his language that of a Shakespeare or a Milton? Does his standard come up to our expectations—the expectations of grammarians on the lookout for flaws? I do not think it does by a very wide margin. But our average hearing person gets along, despite his literary shortcomings. Our deaf person of average mentality and average language gets along. In fact, he gets along so well that he can probably show us wise pedagogues a fatter bank balance and a longer list of property than we possess. And he is just as happy in his possessions and his intelligence as are we in ours.

Some of the deaf will acquire English under the worst of circumstances; others will never acquire it under the best.

Language is only one medium of expressing thought. The sculptor uses marble and bronze, the artist canvas and varied colors, and with these they express thoughts and emotions which language is incapable of expressing. And so on down to the humblest trades and occupations.

In the past decade or two the main idea in trying to English the hearing youth has been to have him write, write, and then write. With the average youth the method has been a failure. One can not write without something to write about, without ideas, without experiences.

In attempting to English the deaf we may lay down the rule of English everywhere. But a too restricted rule of procedure does not always bring desired results. We may mark down a line and demand that everyone walk it. What do we get? Rebellion. If not physical rebellion, then mental. We breed deceit, dislike, evasion.

In my opinion, it is hardly fair to compare a deaf child learning English with a foreigner learning English, or with an American learning a foreign language. The foreigner and the American both have their foundation in a mother tongue. They have some idea of grammatical construction. Their mother tongue aids them in difficult explanations. The deaf child has nothing. He has no foundation whatever. Anything that will aid the deaf child in acquiring knowledge should be used to extricate him from his desperate plight.

Read, speak, spell, write English. Let us have our pupils do this to the utmost. But in doing it let us have an all-around development.

In educating the deaf we must make distinctions. We can not put all into the same mill and expect to get anything but general mediocrity.

I do think we should use more English in our schools. The sign language is abused by its supporters as well as by its opponents. I do not think it should be banished from our schools in chapel services, in dramatic and literary societies, in the ungraded classroom, and sometimes even in the graded classroom. I know that I run counter to some of the best thought in the profession when I say this. But I would not banish the sign language entirely even there. What I keep I would radically improve upon. I would insist on signs as much in the English order as possible. And whenever signs are used I would have the English equivalent given also, time permitting.

Mr. Driggs compared the learning of English with a child learning to walk. We must walk and walk in order to learn to walk. But very often a child uses a chair or other article of furniture to help him along, and a convalescent person very often makes use of a cane.

Dr. Goodwin. There are two other papers; Mr. Manning has asked to be excused from reading his paper, and it will be printed in the report.

DISCUSSION OF THE PAPERS READ BY DR. N. F. WALKER AND MR. F. M. DRIGGS.

By A. C. Manning.

Dr. Walker's enthusiastic and hungry approach to this hour, long looked forward to by him when he might enjoy a feast, is a compliment to every one assembled here, for, prompted by a keen sense of his responsibility, he has opened a discussion which he knows full well might easily become bitter and partisan. He has assured us that the leaders have been very clear upon the subect, and quotes two of them to verify his claim. He also warns us that by muddying the waters we label ourselves as thinkers of the second magnitude. Dr. Walker has frankly and fearlessly placed upon our hearts a tremendous burden in quoting our lamented leader, Dr. E. M. Gallaudet, who said, "The failure to acquire a means of communicating accurately with the world in general, manifest in too many of the graduates of our institutions, stands forth as the gravest practical defect in our system." Dr. Walker's quotation from Dr. Alexander Graham Bell may surprise some who have looked upon Dr. Bell as an arch enemy of the sign language. Emphasizing the fact that he does not oppose the use of signs by adult deaf (as they are supposed to have fixed language habits), Dr. Bell pleads for English, spelled, written, or spoken in instruction, the inference being that the use of signs in teaching militates against the acquisition of English.

These are strong pleas for language and should cause us to pause for serious thought.

Dr. Walker wants our deaf children "less peculiar and less suspicious, broader in vision, happier in judgment, and more stable in citizenship." He

points the way to the accomplishment of this desire, which he reminds us is our duty to our children, by urging us to make English their medium of thought. He insists that they must think in English, that they must see and use nothing but English in the school, at least, I presume, until they have learned to think in English. This is the position I have held for years—not the abolition of the sign language but its use only after correct English has been acquired. English should come first.

In regard to children so backward that they can not learn English, my position is entirely different. The education of backward children is to be discussed here next Saturday morning, and lest I have no opportunity then to express my views, let me say that I hope this joint convention may go on record very definitely demanding that the backward deaf children of America (and there are many of them) have justice meted out to them in the establishment of separate schools, where methods specially adapted to their needs be adopted.

Mr. Driggs has gone to the heart of subject under discussion in assuring us that we must vitalize and humanize language and develop a love for it. I dare say Mr. Driggs is accomplishing these things in his school. I am not an advocate of making the schoolhouse a playhouse, letting children choose the easy tasks and shirk the difficult ones. Ambition to do the seemingly impossible must be created. Well do I remember the inspiration I got, as a boy, out of the story that Abraham Lincoln, when splitting rails, found peculiar delight in getting hold of a seemingly unsplittable, knotty log.

On the same principle that public opinion is stronger than the authority of law, the creation of a sentiment in favor of language is the policy to pursue. Impossible? No; it can be done. It is being done. Witness the success of the Rochester method, which we are to have presented to us to-morrow. Witness the attitude of the alumni association of the Pennsylvania Institution for the Deaf in supporting the method of education pursued by this institution. Other instances might be cited.

May I offer, without elaboration, these suggestions in addition to those made by Mr. Driggs for the development of language: (1) Intelligent use of the five slate system, as long as needed; (2) action work, a great deal of it; and (3) repetition, as expressed in the story of Helen Keller's life—"complete sentences repeated many times a day"—for days and weeks and months.

Dr. GOODWIN. Now, we shall be glad to have a paper from Miss Willoughby of the Clarke School.

DISCUSSION OF "THE USE OF ENGLISH."

By J. EVELYN WILLOUGHBY.

The use of English in schools for the deaf is a subject which has come down to us from those early days when the need of stress upon it began to be apparent. To-day we find it the basic idea in the training of deaf children, our aim being, as a deaf pupil once remarked, "to teach them to language" so successfully that the acquisition of an education comes in a normal way.

In addition to many other good things, Mr. Driggs says that we must make English a living language, humanize it, develop a love for it, make it express child life and experience; to all of which we say, "Amen." But close upon the heels of the Amen follows the question, How? To this question there are answers innumerable. I can hope to speak of only two or three. One of them is action work. During the first year or two, action work of the simplest form has always been a common method of beginning language work, but it has not always been carried on through higher grades, where well planned work will give excellent results. Let me give two or three illustrations, which are merely suggestive and can be varied and amplified indefinitely. A toy washtub, with some soap and water and a few doll clothes, will give an opportunity to use: Filled the tub; make some suds; washed the clothes; wrung them out; rinsed them; hung them on the line.

Again, a doll's bed suggests such sentences as turn the mattress, put on the sheets, put on the blankets, tuck them in, change the pillow slips, etc. A toy stove affords a great number of natural expressions which the children need at home. A doll with a trunk and a wardrobe of reasonable size offers endless possibilities. In fact, there are a surprising number of things which can be done with no paraphernalia whatever—e. g., walked back and forth, stood in

a circle, held out her arms, threw a kiss, tiptoed to the door, looked over his shoulder, turned up his collar, etc.

Another answer to that question, How? is, play games. Any card game gives us: Shuffle the cards; deal; deal to the left; it's my deal; whose play is it; you played out of turn; it's your lead, etc.

Parlor croquet, dominoes, checkers—their name is legion; and games are sure to be beloved by all sorts and conditions of children.

Another answer to that same question can be given in a single word—stories. Mr. Driggs's brother, Prof. Howard R. Driggs, of the University of Utah, most convincingly shows us the place which the story instinct holds in the life of man. In speaking of language as the chief means of expression, he says: "There are thousands of special ways of expressing one's self; but, after all, oral and written language is the one common channel of expression," and "no skill in language is more important than that which enables one to tell a story well. The story plays a much larger part in our lives than we may have thought. Everybody spends a good deal of time during his life telling, and reading, and listening to stories. . . . The magazines are filled with stories of different kinds. . . . The speakers to whom we listen use stories very often to illustrate their points. Teachers also make constant use of stories in instructing their classes; we go to the play to see stories dramatized; even pictures in these days are made to move and tell stories."

There are some things from which the deaf are of necessity shut out, but not from stories. Those they can have, if they have a sufficient understanding of English. Indeed, one can almost say that they may have the English if they have the stories, properly given. At least, stories are one of the most pleasant channels through which English comes; and when our pupils understand and enjoy them, they are getting not only a command of English, but an understanding of life.

There are many ways of using stories. I will venture to outline three, which we have found useful in our schoolrooms, not with the idea of presenting anything new, but because in different localities different names are often applied to the same process. Dr. Walker says that "there must be a demand created in our schools for language." I am sure we all agree most heartily that if there is no demand one should be created. But isn't the demand ever existent. Isn't a deaf child demanding language whenever his desires seek expression? We feel that this is true, and so devote the first year or two of his school life to giving him language in which to express the ideas with which his little mind is teeming. That point attained to some degree, the process of enlarging his vision begins. As one means to this end we introduce stories in the second grade and continue them through the fifth. We employ three distinct types of story, which we call the lip-reading story, the drill story, and the chart story.

A very simple form of lip-reading story comes first; perhaps only two or three sentences about some incident which will interest these small children. They are given orally, as a whole—not word by word or sentence by sentence—and are reproduced by the children in writing.

DRILL STORIES.

In the story used for drill we definitely teach new words and constructions, introducing those which we expect the children to master and to use. The story pretty successfully sugar-coats the drill required, and the work is given in five consecutive steps. The first step is the preparation for the story. In this we illustrate and teach the new words and constructions.

The second step includes the telling of the story orally and the written reproduction by the children.

The third step is devoted to the practice on question forms which deaf children so much need. They read the story through, and then themselves write a set of questions. We have secured best results here by having the teacher prepare a set of short answers for which the children must form suitable questions. Most bright children would ask reasonably diversified questions without this aid, but we all know with what tenacity the dull, the indifferent, and the cautious cling to the forms which they are sure of, and those forms only.

In the fourth step the teacher asks questions on the story, which the children answer, using either short or long answer, as directed. This is all oral work.

The fifth step includes the writing of answers to a set of questions prepared by the teacher. In the earlier grades, only the short answer is required; later

on both short and long are used; the short answer to make sure that pupils understand the force of the question form, the long answer for the practice it gives in expressing a thought in a full statement. (These questions should never be an exact duplicate of the oral questions.)

Further drill work consists of the conjugation of the new verbs in the story, filling of blanks, and the writing of original sentences, using the new words or phrases.

CHART STORIES.

What we now call chart stories were originally simple stories written on the wall slate. Later they were put in permanent form, on charts written by the teacher; hence the name. I am glad to be able to show you samples of such charts in printed form. [Displaying charts]. The type used is large enough for the children to read from their seats, enabling the teacher to make the reading a class exercise. Following her pointer, the children read, in phrases and silently. The teacher makes sure, as they proceed, that they know the antecedents of the pronouns, and explains new words and constructions, for in these stories we do not hesitate to use constructions unfamiliar to the children and beyond their ability to use, though not beyond their ability to understand, with a few words of explanation. We all read with understanding and enjoyment a grade of language superior to that which we ourselves readily use.

On the following day the story is read again (without aid from the teacher), and the reading occupies only a few minutes. After the second reading a few questions are asked (note the emphasis on the word few)—just enough to make sure that the children have gotten the thought from the language, avoiding questions which can be answered from the text. The stories are adapted, in subject matter and in treatment, to the classes for which they are prepared, varying from the simple story or description of some object, for the young children, to the wide range of subjects suited to the increased mental development of the children in higher grades. They make possible the introduction of the fairy tale at the age when fairy tales appeal most strongly, so that along with stories of ordinary child life we can soon use fairy stories, fables, and myths. Occasionally a difficult story is dramatized. It may be interesting to note here that the pupils who have been brought up, as it were, on chart stories have done vastly more voluntary reading during their later school years than was done by classes coming up without them.

From the standpoint of the child these stories are for pleasure only, and are never used for any form of drill work. This pleasure derived from reading, together with the training of the imagination, so unconsciously received, lays a foundation for the reading habit, which later on makes possible the enjoyment of Dickens, Scott, and other standard writers.

LIP-READING STORIES.

The lip-reading story, which I have already spoken of as first in point of time, has undergone such a transformation in succeeding grades that it needs another word of explanation. The lip-reading story, as the name implies, is designed primarily for practice in lip reading, and this story period proves an excellent time and place in which to slip in little colloquialisms, exclamations, and all manner of common expressions, the understanding and use of which do much to make a deaf child's language natural.

Phrases which are repeated again and again are gradually adopted by the children, and if this is kept in mind by the teacher they will in this easy and natural way, without any formal drill work, become familiar with a great number of expressions that too often form no part of a deaf child's vocabulary, such, for example, as the following: Oh, no! out of sight, in the way, such a fuss, hung his head, dropped his eyes, put on his thinking cap, as blue as the sky, as old as the hills, as slow as a snail, and as hungry as a bear.

There are hundreds of them, and many of them strike a child's fancy at once.

We all need at times to be pried loose from favorite or habitual expressions. For instance, why cling to many, many, or far, far away, or he ran very fast? Why not use instead, ever so many, or a great many, a long way from here, or a long way off, he ran like the wind, or he ran as fast as he could.

The lip-reading story provides us with a wonderful opportunity to get out of the rut.

May I close with a word of warning to the young teacher? You may have noted that in these forms of story work the child, in the end, puts into expression in his own language the chief thought of the story. There is danger that you may be deceived by an attentive and seemingly responsive group of children. Do not allow them to hurry you along by their enthusiasm. They do not know that they are grasping only a part of your meaning. Be sure that they are following, that they are all following. You can be sure of this only by insisting that every child gives back the leading thought of the story. That, after all, is the test.

The teacher of language must measure her success not by what she can tell her pupils, but by what they can tell her.

Dr. CROUTER. I wish to announce that this afternoon there will be a meeting of the board of directors of the American Association at 4.15 in the director's parlor of this building.

(Whereupon, at 12.55 o'clock p. m., the meeting adjourned until 2 p. m. this day.)

AFTERNOON SESSION.

The convention reassembled at 2 o'clock p. m., Dr. A. L. E. Crouter presiding.

Dr. CROUTER. The meeting will please be in order. Mr. John D. Wright, who was to preside at this meeting this afternoon, is detained in San Francisco and will not be able to be present during the convention. Dr. La Crosse, of his staff, has kindly consented to fill his place, and will therefore preside.

Dr. LA CROSSE. The first paper on the program this afternoon is "Language for Advanced Grades."

I suppose there is no subject that brings forth as much interest from our people in all of our schools as the subject of the teaching of English. In the schools for the hearing it is said that there is no subject as poorly taught as English. I hardly think that such an accusation can properly be made against our schools for the deaf. My own experience with English has been like that of most of us; the first year we thought we knew it all, and after that we began to feel there was a lot to learn, and to-day, after some 12 years in the work, I feel that we know but very little; but in my work I have found one set of books that have proved very helpful, and they have come to be as near a functional grammar as any books that I have ever used, and they are the series written by Mr. Jones, of the Ohio school, from whom we are to hear now.

LANGUAGE FOR ADVANCED GRADES OF DEAF PUPILS.

By J. W. JONES.

A discussion of this subject presupposes that pupils reaching advanced grades in a school for the deaf have had all the necessary and up-to-date instruction in elementary language and the drill that is necessary to acquaint them with the simpler and easier forms of expression. With this understanding I take great pleasure in passing to the discussion of the subject.

A teacher who is given a class of advanced deaf pupils to be instructed in language has every prospect for a most delightful and pleasing labor. I say the teacher, not the person, because there is a vast difference. A teacher of language is one who knows literature, loves it, and can interpret it. He can make its study delightful to almost any deaf child with sufficient intelligence to reach an advanced class. He can so present his work as to interest, arouse, and even thrill the class with new discoveries of thought and expression. The result of this interest is investigation and overtime work on the part of the pupils.

A person assigned to this task might do none of these things. But, on the other hand, the work would be irksome, uninteresting, and even hateful to both the person and the class. So there is a great difference between a person and a teacher. Of course the teacher is a person, but a person, though presiding over a class, is not always a teacher.

Literature is a product of the best minds at their best and under conditions which make for the sweetest and richest expression. Good literature is an expression of the soul. It should, therefore, be approached and taught as soul work.

While this is true of all kinds of teaching, it is especially true of the teaching of language through literature. The teacher will see the beauty of thought and expression and will be able to make the class see. All avenues leading from the ideas or to the ideas will be opened up and both teacher and pupils will rollic therein. This is because the child's mind craves to know and, as the study of literature keeps it in new fields of investigation, bringing to it continually new views of life and even of commonplace things in life, its interest in and relish for the study increases; and like the starving colt which is permitted to pass from one good pasture field to another, both enjoying life and growing fat, so will the members of such a class in language enjoy the study and grow wise.

These things I know because I have tested them in the actual classroom and study rooms. A few years ago when the Ohio school was unable to find a teacher of English for the junior and senior classes, I threw those into one, making 23 members in the class, and taught the language for a full year. I cast aside all traditions of the school and of the profession, and led this large class into a real study of real literature. My first impression after a few lessons was that the work was far beyond the education and ability of the pupils. It all appeared to them to be dark and unfathomable. They did not seem to know that literature had thought in it. To them it had been but words. I was quite discouraged and was not sure that I was justified in such radical departure from old methods. But at the close of one recitation early in our work, one of the girls said the lesson was very beautiful. She liked it. To my surprise nearly all of the members of the class expressed pleasure in it. Thus encouraged, I continued to present selection after selection of good literature. Not long selections, but always what I thought the class could master in one lesson. With the aid of a stenographer I prepared discussions of the lessons to be studied and furnished each pupil a carbon copy. This helped them greatly and stimulated effort. I soon found that the pupils were interested in their language work almost to the exclusion of preparing their other lessons. This, of course, had to be adjusted, but it encouraged me to continue the work as it had been commenced and to make more and more out of it.

Not only did these pupils soon understand and enjoy poetry, including rhyme and rhythm, but they understood dialects and provincialisms. And when they learned that hearing and speaking people often contract their words and abridge sentences and that these find expression in good literature where characters from all walks in life appear, their interest was increased. They took delight in rewriting paragraphs from the language of the unlearned characters into good English. Instead of being everlastingly criticized they became critics. They also found that the idioms and proverbs they had once learned in segregated sentences were really found in composition, and new meaning and interest were attached to them. In fact the whole year's work grew in interest and understanding until the pupils began their evening study before the scheduled time, and often pursued it quite a while after the scheduled time for closing. The course of reading prescribed by the college was easily exhausted, even though it contained such difficult literature as Byron's "Childe Harold," Milton's "Comus," Shakespeare's "Midsummer Night's Dream," and Robert Louis Stevenson's "Treasure Island." At the close of the year six of the senior members of the class stood the entrance examination to Gallaudet College and all passed, for the first time in years.

In connection with this study of language was a persistent effort to teach the essentials of grammar, the classification of words with reference to their meaning and use, and also their relation to other words. But no time was wasted in the old form of parsing, which required the repetition of properties of words that any child will learn in a few lessons. Also very careful attention was given to the anaylsis by diagram showing the relation of all elements, either

simple, complex, or compound. The emphasis was placed upon the real meaning of words, phrases, and clauses, and what purpose they serve in sentences. This the pupils liked also.

The third consideration in the study of language was the adoption of a plan of supervised and directed reading in all of the grades, setting apart a definite time for it and persistently following it up. The principle of the whole scheme is that language is learned best by those who have the best acquaintance with it as found in reading matter generally. It is therefore important that deaf children be made acquainted with extensive reading matter adapted to the grade and mental capacity. It is a well-known fact that pupils who read the most have the best use of language, and those who read little or none have a very poor and inadequate use of language.

Our scheme, therefore, provides for much reading under the supervision and with the aid of the teacher when necessary, so as to insure information and understanding—the parents of interest. When the stage of general interest is reached not much more supervision is necessary. An intelligent use of the dictionary is often all that is required. But pupils should be taught how to use the dictionary. We have learned also that the pupils should be taught to depend largely upon the context and to look out for figurative language, for the dictionary is often misleading. This is a difficult matter for a deaf child.

All children are delighted when they reach the age of slang language, either in the oral or written expression. Hearing children use slang and symbolic language to a greater extent than they do when they reach manhood and womanhood. It indicates that they like it. To them it is very expressive; besides a better language is often lacking. In this regard the deaf child is not unlike the hearing, except that he does not come in contact with so much of it. But when his attention is called to the use of symbolic language and he understands the significance, he usually takes delight in using it as much as possible. You can not please your class in language more than by presenting it with a selection involving figures of speech, or slang, and bywords. The pupils feel they are then dealing with the real life of hearing people, and by understanding their language they become more like them and can meet them on a common ground. A joke or pun placed on the wall slate occasionally will arouse discussion and increase interest.

Figures of speech, idioms, and proverbs are all best taught in the composition. The old method of teaching these important phases of language in segregated, individual sentences was never effective. But when they are taught in connection with other language, the pupils immediately see their significance and force, and therefore get the proper knowledge of their meaning and use. All of this is best developed in supervised reading. Therefore, we attach as much importance to it as to any other form of language teaching. The avenues to a good understanding and use of language are:

1. The study of a composition from the standpoint of the meaning and relation of words, phrases, and clauses, generally known as grammar and analysis;
2. The study also of irregular language, such as figures of speech, idioms, proverbs, slang, and bywords; and
3. An association with language by the reading of it.

Perhaps all of this can best be shown by the discussion of a few selections as we think they should be presented to an advanced class of deaf pupils.

In presenting a selection, easier ones should be given first and those in which children would have a natural interest. This applies to all children as well. When I was superintendent of a public school, the junior high-school teacher had a rebellion on his hands in trying to teach some literature. The matter had grown to be a very serious one and came up to me for adjustment. The pupils had refused to write compositions, to recite, or to take any other respectable part in the work. I investigated very carefully the cause, and found that the teacher did not know any literature, was entirely unable to lead and interest the pupils in its study, and in making assignments of topics he did not suit them to the pupils. Of course, I had to support him as far as possible, and yet I felt his entire scheme was inadequate and wrong in principle. I asked him if he would object to my taking the class for one Friday afternoon. He said he would be delighted to be relieved, and would not feel it a reflection upon him for me to take the class. I therefore made the selections of "Miles Standish" and "The Cotter's Saturday Night." As you well know these are both love stories. The pupils were at the proper age to be interested in love-making. I gave them a preliminary talk, just enough that they might get the gist of both stories. Then

I divided "Miles Standish" into several parts and assigned to pupils to paraphrase. "The Cotter's Saturday Night" was likewise divided into parts to be committed and recited. When Friday afternoon came every pupil was prepared, and such a happy afternoon as they had! The paraphrasing was excellent, and went deep into the subject. The old story of love, disappointment, unselfishness, and self-sacrifice was brought out. "The Cotter's Saturday Night" was beautifully recited, and understood, and thoroughly discussed. There was no more trouble in that junior high school in literature.

This principle applies to deaf pupils in advanced grades. They have all the instincts of the hearing pupils, are interested in the same things, and should be led into the study of literature by natural and easy routes. They will then associate more with language through their reading and gain information they much need in life, and become better educated. They will form also a permanent habit of reading which will be a continual pleasure to them.

Our first suggestive study is Oliver Wendell Holmes's poem The Last Leaf. The pupils should be informed as to who Holmes was, the general nature and extent of his writings, how he ranks in American literature, and any interesting things about him. They may then be introduced to this poem. Three stanzas will be enough for one lesson:

They say that in his prime,
Ere the pruning knife of Time
Cut him down,
Not a better man was found
By the crier on his round
Through the town.

These questions might be given to the class to be used in connection with the study:

What does "in his prime" mean?
What word could you substitute for "ere"?
What is a pruning knife and why is it used here?
What does it really mean in this use?
Why does "Time" begin with a capital letter, being the last word in the line?
What does "cut him down" mean?
Rewrite the first three lines in natural language.
What is the meaning of the word "crier"?
Why was it necessary in the early history of our country for towns to have criers?
What does "on his round" mean?
Rewrite the whole stanza in simple language.
What does the clause "ere the pruning knife of Time cut him down" modify?

The mossy marbles rest
On the lips that he has prest
In their bloom,
And the names that he loved to hear
Have been carved for many a year
On the tomb.

What does "mossy marbles" refer to?
Why is "marbles" in the plural?
Why are they spoken of as "mossy"?
How do these mossy marbles rest on the lips of those who are dead?
What is the meaning of the word "prest" in this sentence?
What does "that he has prest in their bloom" modify?
What part of speech is "that"?
What is "that" the object of?
How will you read it to show it an object?
Where are the names that he once loved to hear?
What does "tomb" mean in this sentence?
What does the clause "he loved to hear" modify?
What part of speech is "that" and what is it the object of?
What is the construction of "names"?
What does "for many a year" modify?
What does "on the tomb" modify?
Do you think Mr. Holmes was speaking from experience when he said "the lips that he has prest"?

Rewrite the stanza, putting it in simple language.

And if I should live to be
The last leaf upon the tree
In the spring,
Let them smile, as I do now,
At the old forsaken bough
Where I cling.

What does "the last leaf upon the tree" describe here?
What figure of speech is it?
Do you think it is a more beautiful expression than "the last of my family"?
What does "in the spring" mean?
Do some leaves hang on to the trees until springtime?
Do you think this man would have to be very old to be like "the last leaf upon the tree in the spring"?
What people does "them" refer to?
Do younger people smile at old folks as they totter along the way?
What does "bough)" ordinarily mean?
What does "old forsaken bough" mean in this stanza?
How do people cling to life?
What does the phrase "in the spring" modify?
What part of speech is "where" in this sentence?
What two words is it equivalent to?
Paraphrase this stanza into simple, easy language.

Take a selection from "The Little Shepherd of Kingdom Come" and let your pupils become thoroughly acquainted with the boy Chad. Tell them enough of this story to interest them, and they will read the book. Chad's prayer:

"God!" he said simply, "I hain't nothin' but a boy, but I got to ack like a man now. I'm a-goin' now. I don't believe You keer much, and seems like I bring ever'-body bad luck; an' I'm goin' to live up hyeh on the mountain jes' as long as I can. I don't want you to think I'm a-complainin'—fer I ain't. Only hit does seem sort o' curious that You'd let me down hyeh—with a keerin' fer nobody now, an' nobody a-keerin' fer me. But Thy ways is inscrutable—least wise, that's what the circuit rider says—an' I ain't got a word more to say. Amen."

There are many words in this little prayer which a class of deaf children will not understand in the beginning. They should all be pointed out to the class and proper words substituted. Show the class the double negatives where they exist, and show them how a double negative makes an affirmative.

What does "let me down hyeh" really mean?
Why does "Thy" begin with a capital letter?
What words can you substitute for "least wise"?
What is a circuit rider?
Why were they once so numerous in our country, and so few now?
What does "Amen" mean?
Do very many people talk a language like Chad's?
Where are they found?
Do you understand the full meaning of this little prayer?
Rewrite it into good language.

Take the twenty-third Psalm. It is figurative language almost throughout. Many schools for the deaf have the pupils commit it to memory. Yet without explanation or preliminary training in figurative language, not many have any idea of its meaning. It offers a world of opportunity for valuable information, including history, customs, manners, punishments, and kinds of work.

1. "The Lord is my Shepherd; I shall not want."
How was the Lord David's shepherd?
What is the work of a shepherd?
Why will David not want?
What will he not want?
Can you express the same idea in any more beautiful language than David used?
Is the Lord a shepherd to all people?
Is "want" a transitive or an intransitive verb?

2. "He maketh me to lie down in green pastures; He leadeth me beside the still waters."
What does "He" refer to?

What does "me" refer to?
What does he mean by "green pastures"?
Tell how sheep were cared for in Palestine.
How are sheep cared for in the western part of the United States?
What are still waters?
How do green pastures and still waters apply to a good life?
For the imagination:
Can you see the sheep in green pastures just filling themselves and then lying down to rest?
Can you see those pastures grow thin and dry because of the lack of rain?
Can you see the sheep later beside the river, lake, or sea?
Can you see the still waters, and can you contrast it with a dashing, running creek?

So on through this beautiful psalm. Every avenue of thought should be opened up to the children and each beautiful expression fully explained. At the end they will know what it means. "Restoreth my soul," "Valley of the shadow of death," "Thy rod and Thy staff," "Preparest a table before me in the presence of mine enemies," "Cup runneth over"—all these offer excellent opportunities for information increasing the child's knowledge and preparing him to understand figurative language at other times when the teacher is not present.

And so with the study of idiomatic English the teacher must continually call attention to the unusual words and to all forms of syntax out of the ordinary. No chance should be lost in making the study of a selection real, as a piece of human work and representing the experiences of nearly all human beings. In the study of literature imagination plays a great part, and unless the teacher is full of it, it is very difficult for him to lead a class so that the pupils may see what the author saw and feel in a measure what the author felt.

Miss Helen Keller was to speak in Columbus, Ohio. Before the address I was in conversation with two psychologists, one a professor of Ohio State University and the other a professor in a near-by college. They were discussing the impossibility of a deaf person's having imagination. They had it reasoned out and backed up by high authority. The conclusion was that no person born deaf could have imagination. By and by, when Miss Keller's address was finished, an opportunity was given for persons to ask questions. One of these psychologists asked her what faculty of the mind had served her greatest purpose in getting and using her education. Her fingers at once flashed the answer, "Imagination." This did me a lot of good, for I had already told them I thought they did not understand the mental activities of the congenitally deaf person. But they seemed to think that they had very high authority for their judgment, and evidently with all certainty of purpose wished to learn from Miss Keller what faculty or faculties of the mind had taken the place of the imagination with such great success as was evidenced by her education. I did not discuss it with the professors afterwards, but I take it they thought she was mistaken.

Deafness does not of itself impair any faculty of the mind nor does it deprive any faculty of the mind of its fullest development, if opportunity is offered under good teaching and good environment. But so many teachers lack faith in what the deaf can learn. They therefore keep within the well-known forms of expression of the primary grades, and follow old methods.

Dr. E. M. Gallaudet, in a very able address on "Deaf-Mutism," published in the International Review for July, 1875, points out clearly the difficulty a congenitally deaf person has in mastering language, and accounts for the so-called deaf-mutisms which were once more prevalent than now in the language of the deaf. He says:

"A large vocabulary of words may be mastered, a limited ability of imperfect expression may be secured; in certain cases even, and with a peculiar class of minds, there may be an approximation to a correct use and full understanding of verbal language. But where the habit of thinking in signs is once well established, we question whether mental deaf-mutism is likely ever to be completely removed by the available processes of school training.

"The mute thus educated must remain a foreigner to his native tongue, laboring with almost every line he attempts to read, translating everything into signs before he can understand or enjoy, often losing thus the point of an argument or the cream of a joke.

* * * * * * *

"Not until we can understand and speak the new language without translation does its use cease to be a labor to us, and we certainly do not feel at home in it until we can use it as a vehicle of thought.

* * * * * * *

"The deaf mute who never acquires the power of thinking in verbal language has few incentives to read. He may pick up simple items of news from the daily papers. He may now and then, with dictionary by his side, take in the full import of some book. He will be more apt to skim what he pretends to read, comprehending enough to afford some pleasure and perhaps a little profit, but remaining mentally oblivious of much that the hearing and speaking reader will understand and enjoy.

"Many instances have fallen under the personal notice of the writer where deaf-mutes of unusual intelligence were debarred from all real enjoyment of reading, simply because they had been allowed in early life to confirm the natural tendency to think in signs and had not been compelled to acquire the power of thinking in verbal language.

"And if reading be so difficult and profitless to one who continues in the condition of mental deaf-mutism, what must be said of his power of verbal expression? How can he be expected to write correctly who can not read understandingly?"

Dr. Gallaudet has hit the language nail squarely on the head. It is impossible for a deaf child to learn language unless he is made acquainted with language from the beginning of his education and in a much more general way than is practiced in most of our schools. It is true that much blackboard work on the part of the teacher is fundamental. The child must be taught the simplest forms of expression and later the more complex and compound forms on the wall slate, charts, and notebooks. It would be as foolish to plunge a child into a book without this preliminary training covering several years as it has been in many instances to be satisfied with this preliminary training and omit a more general reading. The two go hand in hand. And the time will never come in the school life of a deaf pupil when the teacher can neglect to return to the primary expressions referred to above. But by a systematic, graduated course of reading the necessity for referring to standardized expressions taught in the lower grades will grow less and less. Deaf-mutisms largely disappear with the study of language through literature. This study, of course, does not mean an understanding of the context alone, but covers also reproductions and original composition on matter which may appear in the discussion. The questions asked in this discussion are themselves instructive. The answers surely call on the pupil for the use of language. The study offers an opportunity for a very wide range of questions, all enriching the pupil's vocabulary and helping him to form the habit of thinking in what Dr. Gallaudet calls "his native tongue."

This training naturally takes him away from habits he may have formed on the playground or elsewhere out of school, and holds him for the time being in an environment of good language. No school need expect those of its pupils to have a free and easy use of language, or even a clear conception of the printed page, who have not been thoroughly grounded from the beginning to the end of the course in the habit of reading.

Several years ago Dr. Gordon, then professor at Gallaudet College, said that but few congenitally deaf pupils entering college could read an ordinary page of idiomatic English and understand it. His criticism was not upon the pupils entering college, but upon the schools from which they came. You might as well expect a lot of boys to swim who had never been in water, although their parents may have given them practice on dry land, as to expect the deaf to understand the printed page when they have never been taught, or exercised, or practised in the language of thousands of pages. Here then lies the work of the school and the teachers.

It is not hard to understand why, in the early days of the education of the deaf in the United States, the work was difficult and less general than it is to-day. In the first place, it was new and no one understood its possibilities. In the second place, the equipment was meager. In the third place, a teacher, though chosen from the scholarly professions, did not have access to the thousands of books that are in existence to-day. The literature most in use at that time was the classics. These professors were students of Latin, Greek, Hebrew, and the writings that usually go with such studies. But it was never thought, perhaps, that these would be applicable to the instruction of deaf children. But the very best of these works have been simplified, retranslated, and put

into practical and suitable form. Besides, many new ones have been published. There is therefore no reason why these new things should not be used abundantly in all schools for the deaf. They bring language of all kinds within reach of the teacher and pupils. And very little effort on the part of the capable teacher will increase his faith and stimulate his efforts to the everlasting good and enduring happiness of the pupils.

But it is not all with the teacher. The school must furnish the books, magazines, and other equipment. Equally important, it must furnish the reading and language atmosphere. It must have a strong conviction on the subject. Every good effort of the pupils must be applauded and bulletined. Attention must be called to every sign of progress, and success must be heralded from the chapel stage, not as a preachment, but as propaganda. It requires teamwork, equipping, teaching, supervising, inspecting, testing, supplementing, praising, and righteously exploiting. All are necessary to make a first-class success of language proficiency in a school for deaf children. Happy is the school whose team has this great work as one of its goals!

Dr. La Crosse. The first discussion on this paper will be by Mr. Francis H. E. O'Donnell, of the California school.

Mr. O'Donnell. Mr. Chairman, fellow teachers, I read that paper at half past 3 o'clock this morning, the first time I had ever seen it. Mr. Jones handed it to me about 9 o'clock last night. I read it at that time because the light over the cubby-hole where I slept—tried to sleep—was too strong to sleep by, and it was just a little too dim to read by. However, I think I got the general sense of it, and what I have heard this afternoon has completed my understanding of the paper.

I have used Mr. Jones's books for a number of years. I never met Mr. Jones until yesterday. I shall never want anything of Mr. Jones and Mr. Jones will never want anything of me, and for that reason what I have to say spells "Sincerity." I want to say that from the first moment I read the preface to the first book until I shook hands with Mr. Jones yesterday, I was of the full opinion, and still hold that opinion, that we had a real man in this work. [Applause.] That we had a man who puts his soul into things—and, fellow teachers, if our souls are not in this work we should not stay in it. I have been in it 45 years. For the last 24 years I have had my own flesh and blood as one of the reasons for my continuing in the work. When it hits right home here in the heart that is when we get real consecration in the work.

Friends, I do not believe in being too serious. In fact, I think that the greatest asset that the teacher of the deaf has is a sense of humor. Oh, if we will only keep those mouth corners turned up. If we will only keep on smiling. If we will only do what that British Tommy did across the water, for four years in that blood and slaughter. The one thing that kept Tommy going was the fact that he kept on smiling. We have got to keep on smiling, if we are going to do effective work in the teaching of language, elementary, intermediate, or advanced, to these pupils of ours. When the child sees the teacher with a sympathetic smile upon the face; when the child knows that there is loving sympathy there, we are not going to have any trouble about results. I don't care whether we are progressive oral advocates, whether we follow the Oral Association for the Promotion of Speech to the Deaf, whether we are members of the Convention of Instructors of the Deaf or whether we are the most hard-grained dyed-in-the-wool—I think they are all dead—followers of the old sign system, if we have our love right there, and the pupil

knows it, the method, whatever it is, is going to spell success in the life of that child. The main factor is winning the love of the child, and then he or she is ready to listen to everything that we have to say. He is ready to cooperate with us and to give his best efforts for his own improvement.

Now that is just what Mr. Jones has been talking about in his paper. He has not said anything new. He knows that. He simply set before us the ways and means which have been efficacious in his own school, methods which he has adopted from ideas generated within himself to carry on this great work. He has given us the splendid benefit of those ideas, and we can do no more in discussion or otherwise than possibly to add a few ideas to them.

Now, we all know—we know only too well—that one of the greatest difficulties we have in the work of teaching advanced English is the idiomatic difficulty. A normal person has the same trouble when trying to learn a foreign language. No one can learn a foreign language properly except by living among the people and picking up the idioms from day to day. We know how it is with our best educated deaf, with men who have been through college and graduated and postgraduated. We know that sometimes when normal people let slip some right up-to-date idiomatic expression, the highly educated deaf scholar goes all to pieces. He doesn't understand what has been said. Then we find that we have to do just as Mr. Jones said: We have to get busy and explain. I remember the first time I ever met a certain Mr. ——, a deaf mute and a graduate of a first-class school. He had gone through the State university and got a master's degree. He afterwards took postgraduate work in a still higher college. I used the expression "up against it," and I got him. He didn't know what I meant. He said, "Why, you aren't up against anything." And I was really "right up against it" at that time. You know the deaf are not the only people in the world who "get up against" these idiomatic expressions. We have friends right amongst us here to-day—I know them and they know me—they have come from over the border and some from across the sea. Some of them have been here but a few hours. We Americans can say something in the utmost sincerity, the greatest simplicity, only to see them shocked, very much shocked, quite horrified by the things that we happened to say. We can do this innocently, believing our words to be both good and pure English.

Let me tell a little story. I took it from Life the other day. An English lady and her daughter were visiting London. They were sight-seeing on the top of a London bus—and when sight-seeing in London the top of a bus and the seat beside the driver is the best way to do it. The lady and her daughter sat beside the driver and listened to the wonderfully clever repartee at which Cockney bus drivers are so apt. They were greatly interested until the time came to get off the bus. Seated behind the English lady and her daughter were two young American soldiers—it was during the war, and the time when our boys were over there pretty thick. The two young soldiers were seated right behind the lady and her daughter. As the time came for the ladies to get off the bus, the mother leaned over to her daughter and said, "Alice, Alice, get off this bus just as I

do. Be sure to do that. Get off just as I get off." The old lady got up and started to back off the bus. Anybody who knows the top of a London omnibus will realize it to be quite a funny sight to see a lady backing all the way across the top and down the back steps. The mother did it, and Alice followed suit. They got down and off safely. Alice turned to her mother, very much chagrined, and said, "Ma, why did you do that ridiculous thing? You made us the laughing-stock for everybody on top of that bus." "That may be true, daughter," she said, "That may be so, but it was quite necessary." "Necessary? Why, ma, I don't see how it could possibly be necessary." "Why," said the old lady, "didn't you hear the awful remarks that those two American soldiers made?" "No;" said the daughter, "I just heard them mutter something. They said nothing that I heard." "But," said the mother, "I caught what they said. The moment we started to move I heard one of them say distinctly, 'Let us pinch their seats.'" [Laughter.] Now, we know the American boys meant no harm to the English ladies. I am only telling this to illustrate how possible it is, even among educated, hearing people, supposed to speak the same language, to have funny incidents happen when the one does not understand the idioms or the slang of the other.

We can follow the course so well laid down by Mr. Jones, and it is all excellent. We all follow it more or less, and we get great results. Now, permit me to refer to another kind gentleman sitting right here—Dr. Hall, of the National College, in Washington. I have met him, been entertained by him, and never enjoyed the company of any man better in my life. I am just taking the opportunity and the pleasure at this moment—because it is possibly the only chance I shall have—to tell these good gentlemen what I think about them. It has been 30 years since I got a chance to come back East and meet any of them. I want to say that men of the Hall, Crouter, and Jones type are real men. They make us feel proud of our profession. Personally, it makes me proud to think that my life has not been wasted in such goodly company. [Applause.] I feel happy when I see the loving-kindness, when I feel the real grip of the hand, and enjoy the sympathetic friendship and fellowship manifested equally by all engaged in this great work, this great work of doing unto these little ones—you know the rest—and we are doing it. We do it unto them when we work for them from the depths of the soul.

Now, my friends, at half past 3 o'clock this morning I prepared a paper [laughter]—not a very lengthy paper—and it was scratched, as I have told you, under difficulties. As I see it is quite the custom here to write papers, I am going to encroach upon you for the few moments necessary to pass this paper up for transcription or relegation to the wastebasket, just as Prof. Day sees fit.

The paper read by Mr. Jones is a résumé of his preface to his well-known textbooks on the study of English. The subject matter particularly appertains to book 3, "English for Advanced Grade Deaf People."

We have been more than pleased with his presentation of this difficult subject. I knew we would be. We have been edified, enlightened, and instructed. We are conscious of the great patience and perseverance on the part of both pupil and teacher necessary to the real practical application of his plan. Patience and perseverance

are the only short cuts to success in the education of the deaf. The ladder of language can be climbed only one round at a time; the greater the height to which the deaf student ascends, the greater are the possibilities of a heavy fall into that awful labyrinth of orthographical idiosyncrasies, grammatical exceptions, and idiomatic inconsistencies. We pity the poor foreigner who gets mixed up between the she-horse and the chief executive of an American city. [Laughter.] They do that. How much more should we feel for our many aspiring, patient, persevering pupils who so frequently get up against it in their endeavors to understand English as she has spoken, written, or read.

John Bright, the greatest of all English orators, made Simon-pure Anglo-Saxon the zenith of his oratorical ambition. He gave spell-binding and effective parliamentary speeches of two, three, and four hours' duration, in which more than a 3-syllable word was a very rare exception. Our own beloved Abraham Lincoln gave us that gem of patriotic Americanism, the Gettysburg Address, under the greatest stress of feeling and surrounding conditions. He wrote it—I know a man who saw him write it and told me about it—he wrote it on a torn scrap of wrapping paper with the stub of a pencil, while traveling on what we might call a piggly wiggly train to the great battle field where had been sealed in blood the destiny of the liberties of this great land.

What is the value of advanced English to the high-grade pupils of our schools for the deaf? We know that it means for them the open sesame to the wonderful garden of English literature. Shakespeare, Spenser, Oliver Wendell Holmes, Emerson, etc., are brought within the range of their comprehension; the law of motion and numbers, the mysteries of mathematics, the investigations of science, the discussions of philosophy, and the uplift of ethics become factors and practical possibilities in their future lives.

Prof. Jones in Book III does a great work in his method used to encourage interest and help the deaf student. Personal experience has proven that the deaf pupil loves to talk upon advanced topics quite as much if not more than his hearing contemporary. This is particularly the case when he knows that he will receive only constructive criticism. The deaf are inclined to be supersensitive to their own errors and intensely resent ridicule and hypercriticism. Conversational exercises graduated from the lowest to the highest grade are exceedingly helpful to the deaf student of advanced English. Talks upon books and other reading matter, upon the character, plots, and purposes of the particular literature, upon political, scientific, and practical data of daily import, and upon the international, national, and local questions of the day give real delight to the more advanced of our deaf scholars. The teacher of advanced English to the deaf has a tremendous responsibility. Shut out, as even the most advanced oral students are, from much of the colloquial vernacular of their kith and kin and other human kind, we must do everything possible to help and encourage the reading and writing habits among the deaf. The possession of this ability is one of the highest attributes of any teacher.

Prof. Jones has elucidated many methods to this end. No teacher has a monopoly of all the ways and means; each has his or her own data gleaned from more or less successful experience. Here is one

which has proven of much value to my own pupils. Take a brief item of local, national, or international news from a daily paper or a current magazine; let the pupils ask from 5 to 10 questions upon the general import or purport of the news item; exact queries of an indirect character, questions which can not be answered by a simple "yes" or "no." Correct query or question work, as we all well know, is one of the greatest stumbling blocks to every deaf pupil on the road to advanced language. Eliminate duplications of the same question; encourage volunteers who think they know the answers to questions other than their own to give their answers in full for the benefit of all. Let the teacher supply the answer, if possible, when no pupil has the correct idea.

After having thoroughly thrashed out the import of the whole item, then follow the same procedure with the particular words.

For example, Gen. John Pershing has notified the Secretary of War of his intention to retire from the Army at the end of the present year. We would expect to get in the first series of this type questions such as these:

Why has Gen. Pershing decided to retire from the Army? How did Gen. Pershing notify the Secretary of War? Will Gen. Pershing continue to receive pay after his retirement from the Army? Why does Gen. Pershing defer his retirement until the end of the present year? How long has Gen. Pershing been an officer in the Army of the United States? When did Gen. Pershing graduate from West Point? What was the highest command ever held by Gen. Pershing in the American Army? Etc.

Whenever the teacher finds himself or herself unable to answer any query asked, he should not hesitate to say, "I don't know." Then add: "I shall endeavor to find out." The best way to find out is to look at the World Almanac, the Encyclopædia, the Book of Knowledge, the Dictionary, or any particular work of historical, scientific, or other data wherein the particular facts may be found, and to sift the subject and show the pupils how you arrive at your conclusion as to the best books or the best way to get the necessary information. Encourage the pupils to seek for themselves, and be sure to ask for future presentation of the facts.

Next, let Gen. John Pershing, the individual, become the subject for analytical inquiry; likewise the Secretary of War, then the American Army, the matter of retirement, etc. After the conclusion of this research any particular topic of inquiry may be used as the subject for an essay or composition.

Now—and in conclusion—business letter-writing in all its aspects is of great importance to our pupils. The particular forms of idiomatic expression common to the business world are of peculiar, often of pecuniary, value to the deaf student of advanced English. Everybody has at some time or other to make use of commercial correspondence.

Private and social letter work has likewise its place in our curriculum. Detailed description of individuals, of places, of things, and of ideas are each and all steps up the ladder of language. The cultivation of observation and the psychological formation of ideals leading up to world-picture painting, and the imaginative work of the short-story teller, the prose writer, the poet, and even the descriptive

news paragrapher—these are each and all fine arts, included in the scope of advanced language.

There is no end to the possibilities. The teacher of advanced English to the deaf must run the gamut from street corner colloquialism, via the scenario of the moving-picture playwright, to the highest flights of English and American literature—vocabulary, vocabulary, and still more vocabulary!

Stick a pin between the leaves of a closed copy of Macaulay's Miscellaneous Essays; open the book, and no matter between what page the pin was inserted we shall find a greater variety of real English words than in any other English work, Shakespeare not excepted.

The teacher of advanced English must be an expert in every possible device to unravel the mysteries of that marvelous combination of sound signs, idioms, and idiosyncrasies known as the English language. The spirit of cooperation, cooperative interest, and enthusiasm must animate and encourage both the teacher and the student. Paraphrasing the words of America's greatest poet, Longfellow,

> Ever onward, still pursuing,
> They must learn to labor and to wait.

Dr. La Crosse. The discussion will be continued by Mr. James A. Weaver, of the Mount Airy School.

Mr. Weaver. Mr. Chairman, ladies, and gentlemen, I feel that after listening to the interesting paper read by Mr. Jones, and the eloquence of my friend, Mr. O'Donnell, the few remarks that I am going to make will seem very dry.

I say, "my friend, Mr. O'Donnell," because the relationship existing between Mr. O'Donnell and myself is something similar to what Mr. O'Donnell described as existing between himself and Mr. Jones. We never met before the present occasion. Mr. O'Donnell started in the work of teaching the deaf in the same way as myself, as a boy. He started in the same school in which I began to work, but I never met him. He left that school some years before I went there. I have heard a great deal of him and read his writings, but we never met until we met here at Mount Airy. It was a case of the East meeting the West—I might say that it has been a very pleasant meeting.

Now, these two gentlemen have discussed the question of advanced language for the deaf in a very thorough manner and I hope you will excuse me if I talk upon a slightly lower level than they have been talking on. I will endeavor to put a few thoughts before you regarding the period prior to that which those two gentlemen have been talking about. I am going to speak about the period which we might describe as being preparatory to the advanced language period, to the time when pupils are dealing with the more elementary forms of language with which they must familiarize themselves before entering upon the study of the language of literature—we might call it the intermediate period, perhaps.

TEACHING OF ADVANCED LANGUAGE TO THE DEAF.

By James A. Weaver.

In discussing the question of the teaching of advanced language to the deaf it is necessary to consider just what we mean by "the deaf." In our schools to-day we have children who lost their hearing after having acquired a fairly

good command of colloquial and literary English, who were sent to us because on account of their loss of hearing they could not continue to make satisfactory progress in the public schools; we have also the hard of hearing, the semideaf, the semimute, and the congenital or the born deaf. Now, when we are speaking about advanced language for the deaf, to which of these classes do we refer? We have not yet adopted any plan of scientific classification of pupils in our schools for the deaf such as are in vogue in Denmark. It will be a good thing when we adopt some such plan. A scheme of language teaching that might be applied to one or two of these classes or types of pupils with good results and which would give satisfaction to the teacher might easily prove to be a miserable failure if attempted with the others.

An old friend of mine, who spent his entire life in teaching the deaf, used to say that one-third of the pupils in every school for the deaf might safely be taught with some amount of success by any known method the teacher cared to pursue; another third would need some special treatment and call for special training on the part of the teacher, and the remaining third he described as being in the ruck ("the ruck," I may explain, is a race-horse term meaning the common sort), and those in the ruck would need still more specialized treatment and training. I am not so much interested in the teaching of that type of pupil described by my old friend as capable of being taught by any method—to whom the intricacies of language present but little or no difficulty, but I am interested in those to whom the study of language means the toilsome following of a long, long trail over seemingly endless obstacles and difficulties. I am looking for the time when we shall be able to say, with a fair chance of seeing the fulfillment of our desires: Here is a scheme of language teaching based upon the principles of the laws of thought which, if followed through all the stages of instruction from the primary to the advanced grades, will lead the pupil by easy gradations to the comprehension and enjoyment of the language of books.

I, for one, do not think that during the last 25 or 30 years, considering the advancement that has been made in educational science generally, we have made much progress in the teaching of language. Mr. Jones says that the members of the class he taught did not at first seem to think that literature had any thought behind it. The real trouble is that much of the language that is taught to and used by the pupils in our schools to-day has but little thought behind it. In other words, there is too much mechanical teaching and the pupils are not trained to think. The born-deaf child does not learn language unconsciously as do hearing children.

The hearing child learns language just as the necessity for its use arises. The easy and the difficult, the simple and the complex, are, as it were, thrown indiscriminately at the child's mind. What he can assimilate sticks, and what he can not falls back, to be gathered up and thrown again. Unconsciously he learns the names of objects and to express his emotions and his desires. He gets an enormous amount of practice in imaging absent objects when the symbols of these are presented to the senses, and we must remember that nearly all the symbols that cause the images of absent objects to come into the normal child's mind are presented to the ear.

But the deaf child is deprived of this training in imaging or thinking in early life. He becomes familiar with a few suggestive motions addressed to the eye. He is able to some extent to follow a chain of thought, but the ideas that come to him come mainly through the objects themselves and not through the symbols or words by which they are represented. The deaf child, as Dr. Gordon once sa'd, "revels in the panorama of sense perception. He sees much and quickly with his natural eye, but he is almost blind in his mind's eye."

It is here, then, that the teacher must come to the aid of the pupil and teach him to image, beginning with the association of symbols or words with the objects they represent; he will teach his pupils to classify, to compare, and to contrast them; he will carefully lead them on from the known to the unknown, from the simple to the complex, from the concrete to the abstract—in other words, while he is teaching them language he will be teaching them to think.

Every teacher of the deaf recognizes and appreciates the value of reading as an aid to the development of language. To impart a love of reading to every deaf pupil is a consummation devoutly to be wished; but we can not reasonably expect all types of deaf pupils to acquire a good command of English through the medium of reading alone, without any previous training in the use of language.

The longer I teach the more respect I feel for the teachers of the past.

The modern teacher is often inclined to look upon the men of the past as back numbers. Their methods were not perfect by any means, neither are ours. But they made the teaching of the deaf their life work, and, as a rule, they were far better acquainted with the working of the deaf-mute mind and were able to appreciate the difficulties of their pupils far more than the teachers of to-day. There are many people to-day who imagine that all one has to do to become a teacher of the deaf is to attend some training class, take a course in the teaching of speech and lip reading, study the anatomy and physiology of the vocal organs, and blossom forth immediately afterwards as a full-blown teacher of the deaf.

How many of the younger teachers of the present day, I would like to know, make any study of the philosophy of language. How many of them are able on the spur of the moment to give a clear, simple, and correct explanation to their pupils of an unfamiliar word or phrase? To refer a pupil in such cases to the dictionary is often worse than useless.

And speaking of the dictionary in connection with my remarks as to the knowledge and ability of the teachers of the past, where, my I ask, can we find a more serviceable dictionary or one more fitted for the use of deaf children at the present time than the one that was compiled by Thomas Hopkins Gallaudet and Horace Hooker under the title of the School and Family Dictionary and Illustrative Definer? In this book the authors decried the habit of lexicographers in defining one word by another and then the second by the first, thus leading the student to think that certain words are synonymous which often vary widely in their significations when applied to different subjects. They maintained that definitions should be made as simple as possible and that the proper meaning use of most words could be taught effectually only by illustrative examples. I for one would like some one to take this little volume and revise its illustrations to conform to the present state of knowledge, increase its size, and turn it into a dictionary of everyday English that will contain all the common words and meanings required by the pupil in school and the average person in the home.

Dr. La Crosse. Dr. Crouter has asked me to remind the directors of the American Association of the meeting in the directors' parlor at 4.15.

This subject of English is so important, and we see so many in the audience whom we think have something to say, that we are going to give 10 minutes for open discussion. We will have to stop promptly at the end of 10 minutes.

We have with us this afternoon Dr. Hill, who is the inspector of the schools for the deaf in the State of New York. We shall be glad to hear Dr. Hill.

Dr. Hill. I did not come here to talk, but rather to absorb such information as might be found here, and I have been very much profited by what I have heard in the short time since I came.

Language is the tool of expression, the instrument of thought. It is not a thing, it seems to me, in itself so important. It is important because it is a means by which we can express thought, information, and inspiration.

There are several words that have been used here that impress me very greatly, for example, that word "expression."

In education there seems to me to be three things of primary importance. First, impression. We get something, we understand something; we know something. The second thing is expression, and expression is what you are dealing with this afternoon—language. We could not think much if we did not have language. We think with the help of words, and every word that we use has a meaning. We need, first of all, to understand the meaning of words, what they are for. They are simply symbols of ideas, of thoughts,

and we sometimes make the mistake of elevating language above thought, above knowledge, above impression, and we spend our time in a mechanical procedure with a lot of words, and play games with them.

I have seen it done in schools—I am not speaking of schools for the deaf, because I am familiar, also, with many other kinds of schools. We jumble with words in putting them together in a mechanical fashion and taking them apart, and so on, instead of starting out with the idea that, first of all, we must have something to express, and when we have something to express we have the greatest incentive in the world for finding a means of expression, and that is what gives us language, and I am very glad that you realize the importance of language and the importance of your work in teaching the deaf.

The thing that you are up to, it seems to me, is the development of the minds of the children, and you do this, first of all, by giving them something worth while, and in the second place by having them express what they get in spoken and written language. That, it seems to me, is the greatest thing in education, and I am glad to know, to feel that some of the teachers that I have heard talk since I have been here understand thoroughly what we are aiming at in education, and I feel confident that they will accomplish more and more in their work.

In regard to this work that Mr. Jones has outlined to you, the question arises in my mind whether the average deaf pupil in any of the grades as we see them in our schools over in New York, whether very many of them can go to the extent that he evidently suggests in the analysis of such pieces of literature as he refers to, and I am very glad to know that there are some pupils and that there are some schools where the children are carried up to a point where they can enjoy and profit by that what I call more advanced work.

But let me say before I sit down that I am most of all interested, so far as the education of the deaf is concerned, in laying a foundation in the simple, everyday language that the children are going to use through all their lives. I want them to have a vocabulary of words, simple, of everyday use, and to be able to put those words together to express their thoughts. When they have that foundation all the rest comes easy, all the rest is simple, but if they never get that foundation, if they never have clear and vivid thoughts and clear ideas of things their language is bound to be a jumble of words and they never get over their mutisms, as you call them, or their defective expressions. Let them express simple things clearly and fully; then they will be prepared to go on to other things.

Dr. La Crosse. Just a few days ago I had a letter from Miss Beattie, of Colorado Springs, who is on the program to speak on geography teaching. Miss Beattie is unable to be here, and I was also drafted for the position that Mr. Wright was supposed to have, so I shall try to give Miss Beattie's paper, but I can assure you that with Miss Beattie here you would hear something that, together with her own vitalizing force, would be worth while.

GEOGRAPHY.

By GRACE M. BEATTIE.

To vitalize the study of geography; to lead the pupils to visualize as much as possible; to do away with a great deal of the memorizing of unnecessary details that is required in many of our older classes; to lay stress upon the most essential facts to be learned; and to carry the study of this subject into our highest classes—these, it seems to me, are some of the most important points to be emphasized in the geography teaching of to-day.

Among the vitalizing forces to be made use of is the new interest which has arisen in America since the World War, and particularly since the time of our participation in it.

Among our men who went overseas there were thousands who were alert and observing, and they brought back to their homes and to their friends vivid descriptions of the places they had seen and the people in them. It might be said that with these returned soldiers of ours the country has been deluged with good geography teachers, for it is a recognized fact that those who are fortunate enough to be able to bring their own experiences to bear upon the places and conditions they are discussing, as a general rule, make the best teachers of this subject. Vision and life can thus be given to what is in this study in too many cases lacking in these essentials. Some one has said that if from every foreign land that a class was studying there might be brought in a native who could tell in an interesting way the story of his country and of his people, the problem of the best way of teaching geography would be solved.

In addition to the tales told by our soldiers, the innumerable illustrations and articles in our magazines and papers bearing upon foreign places have aroused a great deal of interest in them.

The consequence of all this new matter has been that a desire has sprung up in all parts of our country and among all classes of people to know more of other lands and other peoples, and with this desire has come a realization to many of their great ignorance of foreign countries. Even of South America, next to us, and our possessions—Alaska, Hawaii, and the Philippines—much that was learned in school has been forgotten by the majority of people, and many have but the vaguest ideas of the inhabitants, climatic conditions, or resources of these places.

With the realization of the leading part America is to take in the commerce of the world, the necessity is being felt for our citizens to have a fuller knowledge of foreign lands and alien people than they have. This knowledge must come chiefly through our schools, and the study should continue beyond the elementary grades.

As late as the beginning of this century, geography was considered by most people a study to be practically completed in the elementary grades, with no part in the curriculum of higher schools except as it bore upon other studies; but there has been a change in this regard. Courses are now being given in many high schools, colleges, and normal schools in regional, commercial, and physical geography.

Although many of the matters bearing upon this general movement toward a more thorough study of geography do not directly affect our deaf pupils, if there is to be improvement in any schools regarding it we must also be in line to reap what benefit we may. And if, in the light of the modern interdependence of nations, geography is to be considered a study worthy of being carried into the high schools and colleges for the hearing, should we not also carry it into the higher classes in our schools for the deaf?

The modern movement in geography seems to be to interest pupils mainly in the social and economic life of people, letting physical geography take the secondary position of being studied chiefly as it is responsible for different life conditions in the various parts of the globe. If the pupil can be led to think of the earth principally as the home of man, the air surrounding it, its surface, and its resources all administering to his needs, and if he can be brought to understand how the life of man in different parts of the earth is governed by certain physical conditions, he will doubtless take a much livelier interest in geography than he does in bare geographical facts.

Geography and history should go hand in hand in order to give vitality and visualization to both. Simply to have a child able to locate the little town of Plymouth, without having in his mind the fascinating story of its discovery,

its early settlement, and its colonial life, would be the loss of a good opportunity to give life and interest to the lesson.

On the side of history, to say that during the World War our men sailed from New York to France without having a good-sized map up before the class showing the point of embarkation, giving a description of Hoboken Pier and of the large ocean transports, talking over the sea voyage, and finally telling of the landing at the little town of Brest, with a description of it, would be another lost opportunity to impart a large amount of information.

As so much general interest is now aroused in regard to the various peoples of the earth and as there is so much live matter to deal with, surely it is a good time to break away from many of our numerous memory exercises in physical geography and from the great mass of details crowded into many of our textbooks, which are deadening to any vital interest, and to lay more stress upon the human side of geography.

This brings us to how much geography should be taught in our elementary classes.

At a teachers' convention held last fall in Denver a very prominent professor connected with one of our western universities laid great emphasis in one of his lectures on the mistake we were making in the great multiplicity of unnecessary facts we were requiring our pupils to memorize, when a smaller number of practical facts, well digested, was sufficient. This professor ran the whole gamut of grade studies in this regard, suggesting that great cuts be made in all subjects. Instead of the 10,000 more or less facts in geography with which we weary the poor brain of the average child, he suggested the selecting of 500 sensible facts and having these taught in a wide-awake, interesting way, so that they might be absorbed and remembered by the pupils.

A number of teachers in California have banded together to try to find out what can well be cut out in the studies in order to thus eliminate as much waste as possible in our teaching. Teachers in about 11 cities are working on this problem.

Three questions they keep in mind in this effort they are making, namely:

1. What is the purpose of this subject?
2. What are the minimum number of essentials that should be taught?
3. What are the best ways of presenting these facts?

Private sheets covering the results of this undertaking are now being published, and it is hoped that before another year a publication advocating these changes may be given to the public.

However grateful we will be for relief along these lines, we have, nevertheless, to face the fact that a great deal of prosaic locational or place geography must be well known by everyone who aspires at all to be considered an educated person. It is absolutely necessary to intelligent intercourse or to an understanding of current events of the day to know the location of a large number of certain places in various parts of the world.

This part of geography, however, can be presented in such ways that the drills on it are not irksome. Among the exercises for locational geography there is the favorite imaginary trip, in which the pupil learns almost unconsciously the location of certain places and the routes by which they are reached. The trips along given parallels of latitude and those following certain meridians are well liked. To go around the earth on the same parallel that passes through our home, finding out what the various peoples are like and what they are doing, or to travel along a certain meridian, noting the differences in plants, animals, and the life of the people in the places passed through, all this kind of thing gives the visualization and interest that we are aiming for these days, instead of the dry bones of geographical facts that were given too often in the past.

Besides these imaginary trips, there are the familiar drills in locating places on the outline maps, which in most cases seem more like a game to the pupil than work.

Constant references to maps should be insisted upon until looking up unfamiliar places on them becomes a habit, and the pupils usually enjoy doing this.

The following suggested outline for a five-year course is based largely upon the work in some of our best schools:

Throughout the course four principles are adhered to:

1. The social and economic life of man is regarded as the most important factor, all other geographical facts being considered subservient to it.

2. In each year a certain amount of home geography is given. By drawing from the child's own experiences as far as possible he is led to visualize and understand other conditions than his own in places beyond his own environment.

3. Each new part is introduced in a related way to what has gone before, making the study of the globe one whole.

4. The project method is used in a great number of lessons.

By going somewhat into detail in the work for the first two years, an idea of the leading characteristics of this course may be given.

In the first year the ideas of trade and interdependence are developed. The pupils' homes and gardens and the interdependence of the members of the family are discussed. Then the farms in the vicinity are visited and lists of their products are made. Trips are taken to stores and markets in the local place. Interesting lessons can be given concerning the variety of foods found in the grocery stores, such as home-grown products forming one topic and those from a distance another. Finally, the means of transportation and of local delivery are discussed.

Even with this home geography in the first year of this study a little simple history may be given. Each State has its own story to tell.

In our school in Colorado Springs the story of our State of Colorado may be learned. We can tell how, when the white people first came, bands of Indians strolled about, having camps not far from the present site of Colorado Springs; how they receded before the advent of the white men; how the country was barren except for the few native trees found along the streams, and how the white men had to set about to make the region a habitable place. We can tell how trees were planted; how small gardens were started; of the hardships that were endured, and finally of the establishment of a village. The children can enumerate the buildings that were first necessary in the village—the homes, the stores, the church, the schoolhouse, etc.—and name the industries that were begun and carried on.

Attention can then be called to other towns built in the same region, and of how later we called a certain area, including all of these towns, the State of Colorado. The stories of all of our States are somewhat similar to this.

By branching out, a description is given of the Indian and his life and a comparison is made of his way of living with that of the white man.

This leads to a simple story of the earth, with its people. Taking a globe, the story is told of how our part of it was once all inhabited by Indians; of how the white men came over the sea from the older countries of Europe, bringing civilization with them. A brief description is given of the development of the country, with the building of its towns and cities; of the resources of which the people took advantage; of how streets, roads, and bridges were built; of how transportation was developed; and of how trade or exchange was carried on.

Some simple descriptions are given of the different peoples who came to America and of their way of living. A little is told of the different belts of temperature on the earth, and of some of the peoples who inhabit them, such as the Eskimos, the Chinese, etc.

In the first year of geography, direction and location are taught, beginning with immediate objects and surroundings and leading up to the State.

Map drawing is started by first drawing to scale a table, the room, the yard, etc., leading up to a plan of the city and a map of the State.

In the second year a textbook is introducted with careful supervision at first by the teacher, so that the child may learn to use it intelligently.

The topics this year are home geography, the world as a whole, and North America.

For the home geography means of transportation are studied. Streets, with their pavements, and country roads are discussed in regard to traffic. Stories of early travel and transportation are told, and comparison is made with the ease of present-day travel.

After studying the local city, the way trade or exchange is carried on in the immediate vicinity is first taken up, then throughout the country at large, and finally there is some consideration of our trade with other countries.

This trade with other countries introduces the study of the world as a whole. Imaginary trips are taken around the earth. The great masses of land and bodies of water are talked about, naming oceans, continents, countries, etc., and giving directions of countries from the local place and from each other. At this stage the names of all the principal land and water forms are learned. Some work in locational geography is given regarding important cities, rivers, mountains, etc., and a few geographical principles, such as the rotation and revolution of the earth, are explained.

In enlarging upon the work on the climatic belts touched upon in the first year, vivid descriptions are given of the life conditions of the peoples in the various belts. Collections and lists are made of the various products of the different belts, and the countries in which the products are found are looked up on the maps.

In taking up the third subject for this year—North America—emphasis is laid upon the chief industries.

This subject is introduced by bringing to the children's consideration people's need of food, clothing, and shelter. Then the raw materials used in the articles to satisfy these needs are first taken up, finding out where and how they are obtained. Their manufacture into the articles, and finally the distribution of the finished articles are then studied.

The influence of climate, soil, and surface upon the products of North America is given special attention.

One important industry or pursuit after another is studied—agriculture, grazing and dairying, lumbering, hunting, fishing, manufacturing, and commerce.

By learning of the geographical conditions in certain sections of the United States, the pupils are led to understand why our great wheat fields are where they are; why cotton grows best in the South; why manufacturing is done mainly in the Eastern States; why most of our meat comes from the West; why the lumbering centers are where they are, etc.

The project method may be used in taking up the study of the various sections through these subjects. For instance, in solving the question, "Why does cotton come from the South?" the surface, soil, and climate of the southern portion of our country are studied. The appearance of a cotton field, with its log cabins and Negro laborers, is learned from illustrations and stories. The time of planting and of harvesting and the appearance of the seed and plant are all studied, and the States where cotton is raised are enumerated. The life of the people on the plantations is fully discussed, laying stress upon the way it is affected by the physical conditions of the region.

Other products and industries of this section and the principal cities, rivers, mountains, etc., are also learned in a somewhat similar manner.

For the general study of the United States in this manner, the country is divided into groups of States having the same physical features, and the pupils thus learn the leading facts of each section.

Use is made, whenever possible, of illustrations, moving pictures, and collections of various kinds, and stories of the different parts of the country are told—all with the purpose of helping the child to visualize as much as possible the places he is studying about.

I shall sketch very briefly the outline for the next three years, barely referring to the leading points to be emphasized.

The third year's work includes more home geography and the study of Europe and South America.

For the home geography, immigration, and the foreign population of the United States is taken up. The causes of immigration, the immigrants themselves, the nationalities they represent, what they do for us, and what our country does for them, are all carefully studied. The study of the different nationalities represented serves as an introduction to Europe, which is the second subject in geography for this year.

Europe is studied first as a whole. This may be done to advantage by the project method. Take for one problem the cause of Europe's importance in the world. Subjects bearing upon this are its fortunate location, its equable climate, favorable to the progress of its people; its coast features affording great opportunities for trade; and its many navigable rivers favoring the growth of large cities and transportation. Study is made of its people and of its plant and animal life, and then of its principal countries. Again, by the project method each of the most important countries may be studied, and in the solving of these problems the social and economic life of the people, the physical conditions affecting their modes of life, and their industries and commerce may be learned.

The third subject this year—South America—may be introduced by calling attention to our constantly increasing relations with that grand division, and to the story of the Panama Canal, with the result of its opening upon this trade.

The project method may be well applied also to our study of South America—first, in a general consideration of the grand division, and then of its principal countries.

The divisions of the work in geography for the fourth year are, first, home geography, consisting of the study of the local State in detail; second, mathematical geography, treating more fully than in former years of the form and size of the earth, its rotation, revolution, climatic differences, latitude, longitude, etc.; and, third, the study of the continents of Africa and Australia.

Africa and Australia are introduced by telling the stories of the colonization on these continents by the nations of Europe, and the study of each continent may be made interesting by recourse to the project method in solving such questions as, "Why has Australia made more progress than the neighboring islands?" "Why has Africa made less progress than the other continents?"

In the fifth year the home geography consists of a thorough study of the local city—the city life and government, population, occupations of the people, buildings, etc. Then our territories and Canada, Mexico, and Central America are to be studied along the lines suggested for the various sections of the United States.

Further study is made of North America as a whole and of the leading cities of each section of the United States. A review is made of the most important physical features of the United States in the study of its principal cities by calling attention to the cause of the leading characteristics. The studies of the cities on the Pacific coast and our trade with the Orient serve as an introduction to a brief study of the chief Asiatic countries, our last subject for this year. Attention is focused upon the characteristics of the principal Asiatic people and upon the resources of their lands.

In summing up the following points seem to stand out most prominently in the modern movements toward better geography teaching:

Emphasis is to be laid upon the social and economic life of the peoples of the earth rather than upon locational and physical geography. The earth is to be considered primarily in the light of being the home of man, and its physical features and differences in climate mainly as being explanatory of the variety of the life conditions found in different parts of the globe.

The prominence that has been given in the past to the political divisions of the world is to give way largely to consideration of its natural divisions, with their related facts.

Each continent is to be studied so thoroughly first as a whole, in regard to its natural features, that when later it is divided into its countries the pupil can understand why products and industries of each are what they are, and can also understand better the relation of one nation to another.

Conception of the world as a whole is to be developed by introducing each new part studied in a related way to what has been previously learned.

The vast amount of details that children have been required to memorize in the past is to be reduced to an "essential minimum," so that what is learned may be well digested and held fast.

The subject matter of our textbooks is to be vitalized by interesting methods in the presentation of lessons and by variety in the recitations. The project method, by which the pupils, guided by the teacher, work out the solution of certain geographical problems, is admirably suited to give interest to the study of continents, countries, and the various sections of countries.

The faculty of visualizing is to be developed as much as possible, so that the pupils when studying a certain portion of the earth may have a mental picture of it and its people.

In each grade geographical facts are to be correlated with those of history, to add to the interest and understanding of both.

The study of geography is to be carried into our higher classes.

Finally, with new life given from this fuller visualization and better understanding; with the social and economic conditions of the people of the world playing the principal part; with all of the vital matter that is to come with the greater participation we are to take henceforth in world affairs; and last, but by no means least, with enthusiastic teachers, geography should take a very high rank among our studies.

The discussion on the paper will be led by Mr. Lyman Steed, of the Mount Airy School.

Mr. STEED. Miss Beattie has given us an excellent paper outlining the course to be pursued by our deaf pupils and pointing out the

main facts to be emphasized, such as the economic and social life of the people, the correlation of geography and history, locational geography, visualization, etc. The first step in any line of work is to have the ground to be covered well outlined. The second step is the method of covering the ground, and the interested teacher will immediately inquire into the best methods used in the classroom.

Geography teaching, as has been shown, is divided into two periods: Geography without a textbook and geography with a textbook. No matter what period one considers, the problem of language presents itself. Let me illustrate this, very briefly, at a period when textbooks are not used. Suppose the teacher is preparing to use the expression, "In what direction ——?" First there must be the articulation drill. Then drills on the prepositions to and from must be given:

Walk from ——.

Run to ——.

The movement of the sun from east to west is noted and a compass used. The general directions—north, east, south, and west—may then be introduced, although the word "direction" is not mentioned.

John, walk south.

Henry, crawl east.

After this the directions northeast, northwest, southeast, and southwest may be learned, and drills on north from, southeast from, etc., may be given.

John, walk north from ——.

James, skip southeast from ——.

Just here drill must be given on classification, such as a spider as an insect, a giraffe as an animal, or scarlet fever as a disease, leading up to the classification of north, south, etc., as directions.

A trip out of doors will permit one pupil to walk north or south, while the rest of the class stand with closed eyes. They will then be ready for and required to use the expression, "In what direction ——?"

When the textbook is reached a deaf pupil who has been carefully trained to read word by word is confronted with an entirely new problem. It is necessary to train him to use the textbook, not word for word but in such a way that only the important features of the lesson will be understood and remembered. Too often we assign lessons from page to page or paragraph to paragraph and then are horrified to find one of our pupils stating that "The Belgians are densely populated." Pupils' mistakes are our best guide. Through errors we learn what points need emphasis and time.

We are also prone to bemoan the fact that the pupil is poor material, or that the previous instruction has been inadequate, or that the text is unsatisfactory.

It is true that our textbooks are not satisfactory, but the problem before us is how to use the textbooks we have to the best advantage and not to wait for a textbook that will satisfy.

The mass of details to be covered in the ordinary textbooks leaves the pupil at the end of the year with little real material at his command. A moderate equipment of facts and knowledge is the essential thing for our pupils. We long for a textbook that will be helpful. I hope that some one will in the near future be able to plan a

loose-leaf textbook—one that can be added to or taken from, according to the ability of the class.

The geographical topics studied should be limited. If the outline emphasizes climate, surface, industries, and products as the main topics to be studied, concentrate on these points and get all the facts possible from the textbook used and the supplementary books that can be secured.

Successful geography teaching depends on a careful preparation and presentation of the subject. The following outline for lesson development is suggested because it has been used by successful oral teachers:

1. Articulation drill.
2. Oral language drill on new words, expressions, or idioms.
3. Oral development of facts.
   Questions by teacher.
   Questions by pupils.
   Questions by teacher and pupils.
   Topics.
4. Written questions for study hour.
5. Discussion in the classroom.
6. Study of the subject in the textbook.

Much of the difficulty in geography teaching lies in the lack of language equipment. Pupils try to assimilate facts without an understanding of the language in which they are presented. A teacher of geography must continually be looking forward, and language forms should not be used until thorough preparation has been made. Sufficient language preparation to-day for the lesson of to-morrow will greatly facilitate the teaching of geography.

Mr. La Crosse. I think we shall have to forego any discussion from the floor and proceed to the next paper.

Dr. J. Schuyler Long, of the Iowa School, is to present a paper on History Teaching. Dr. Long, as you know, is well qualified for this subject.

THE TEACHING OF HISTORY.

By Dr. J. Schuyler Long.

When I was a boy I read a story in the Youth's Companion about Ethan Allen, captain of the Green Mountain Boys. As the story went, some of Allen's friends had accepted a wager defending his reputation for courage. The conditions of the wager required that Allen go to a certain cemetery on a dark night, especially propitious for the appearance of ghosts, enter a certain vault therein, remove the lid from a particular coffin on a shelf, and, reaching in, place his hand upon the skull of the dead man therein. Allen agreed. On a night selected by the interested persons Allen went to the cemetery alone, entered the vault, and proceeded to carry out the terms of the wager. Just as he was about to touch the skull, a sepulchral voice called out:

"Beware! That is my skull!"

"All right, old top; I won't hurt you," said Allen easily.

He then replaced the cover of the coffin, and, going to another part of the vault, repeated the performance at another coffin. As before, at the critical moment, the voice repeated—

"Beware! That is my skull!"

"Oh, no!" said Allen, laughing, "no man ever had two skulls."

Now this story greatly impressed my youthful imagination with the idea of Allen's courage and got me interested in the events in which he had a part, and I became interested in the reading of history. I much preferred the stories to

the textbook, and if I did not learn more from them I at least remembered better what I had read.

The introduction of this story here may appear irrelevant, but I want to illustrate therefrom two or more points. And I venture to say that most of you will remember the story long after you have forgotten the other things I shall say in this paper, and then you will agree with me, at least on one of these points.

First, I will say that, whether we realize it fully or not, we are greatly influenced by our early impressions and the methods used in our own education, when we come to play the rôle of educators ourselves. We recall the success or failure in our own case and try to avoid the mistakes of our old teachers when we have weighed them in the balance and found them wanting.

I suppose it is a common experience to realize long after we have studied history that Columbus did not start on his voyage from Palos with the sole purpose of discovering a new country, and that the Civil War was not fought for the sole purpose of freeing the slaves in the South; and probably for that reason you always tried carefully to make these two points clear when it fell to your lot to teach these things; and very probably you did not succeed, for a child remembers one important fact and is apt to draw his own conclusions.

The other point I want to bring out is the value of the story in history teaching. The early teaching of history should be almost wholly through stories. Later, when the textbook stage is reached, it is worth while to have a book of history stories from the supplementary reading library to read in connection with, or as a part of, the history work. I also count it time well spent to stop in the midst of a recitation and tell a pointed story pertinent to the subject in hand or the person mentioned.

The study of history may be begun as soon as the child can understand and construct simple sentences. The usual practice in this—that is, to use pictures of Columbus, Washington, Lincoln, and other prominent Americans, of the Pilgrims, and pictures of historical events, in appropriate months, and weave stories about them, is the best way to do it. Use pictures carefully selected, and aim at character and significance rather than numbers.

The third year is none too early to begin the use of manuscript history for study. A year or so later easy textbooks like those of Anna Davis, Miss Beattie, or some book of history stories may be used to advantage. Manuscript lessons are all right, but a child feels more like he is studying something when he reads it out of a book. When you do use a textbook, use it. I do not like the simplifying process that so many teachers employ. They say the language is too hard and proceed to rewrite the whole book. In this way they give the impression that there is one standard of language for the deaf and another for the hearing. The language may be hard. It is our business to make pupils understand ordinary language, not to construct a special language for them. Let it be a little harder than they are used to, so that they will have to study to understand it. What profit is there in giving them that which requires no effort to master? Carefully prepared questions, explanation in class, and a topical reproduction will serve the purpose of simplifying and elucidating.

When pupils have reached the eighth grade, and in some cases earlier, we take up the real study of history, and at this period I favor the topical method of study. Unless we can bring events together, point out cause and effect, trace the results from the beginning, and draw the moral, history is of little value. We are too prone to follow the textbook from day to day and think we are teaching history if we get the pupils to answer a few questions and correctly state a few facts as given in the book. We are apt to overlook the fact that the book puts down in chronological order and leaves it to us to correlate and bring together. It is for us, then, to guide the pupil in the study of these facts and impress on him the high lights, so that he will be able to draw conclusions and observe results. To do this, great care must be taken in asking questions. This is most important, for the pupil will follow the lead of the questions in the development of his mental picture and impressions.

The most satisfactory and successful method I have used in carrying out the topical plan is to use what I call a "question outline," and which I use in the reproduction of stories. In brief, the plan is as follows:

Make out a list of questions, keeping always in mind the form of the completed narrative which the answers will make. These questions may be given out as an evening study lesson, with answers to be brought to school next morning, or they may be given orally as a class recitation, the answers to be afterwards written on the blackboard or taken down.

Have the questions answered with the short answer. This is for two reasons: First, because these answers form the preliminary step and must be correct; second, you are sure from the answer given in this way whether the pupil understands the question and gives the exact information demanded. He might give a whole paragraph from memory in answer to a question, and it would apparently be right, but he might have no understanding of the question itself or of the answer.

When the short answers have been corrected or written upon the board, the pupil proceeds to combine the questions and answers into a connected narrative, occasionally putting two answers together. The questions and answers lose their identity as such in the form of a story, and it then reads like a narrative. This form is used with pupils not yet mature enough in mind to read, digest, and reproduce the text. When they reach that stage, an ordinary outline will suffice.

I take it that the purpose of history is not merely to store away certain facts in the mind, but to teach the pupils those steps in our national development whereby we have arrived at our present position as a people. Else what is the use of history? We are making voters for the future, and they should know something of the history of the past. Not only this, but they must realize that they are living in a period of history making and should study the events around them. History will then mean something besides a series of events with dates attached. The pupil must, of course, learn and memorize a great many things, the full significance of which he will not now understand, but as he grows older and increases his knowledge he will be able to put those things together with others he learns and form judgments.

Keep in mind this purpose and teach with a definite aim in view.

Dr. LA CROSSE. Miss Mabel Adams, of the Horace Mann School, Boston, will discuss this paper.

Miss ADAMS. I wonder how many persons in this room remember Edward Everett Hale's story, "My Double and How He Undid Me." It is the story of an overworked minister who obtained rest and spiritual opportunity by sending a properly dressed choreman double to all the banquets and boards and public meetings while he stayed at home and attended to his true parish work. The double was not an orator, of course, but with a good deal of coaching he learned four speeches which, with an ingratiating mumble, sufficed to carry him through a year of so-called public duty. These four speeches were as follows:

1. Very well, thank you. And you?
2. I am very glad you liked it.
3. There has been so much said, and so well said, that I will not occupy the time.
4. I agree, in general, with my friend on the other side of the room.

Now, I feel very much like making use of Nos. 4 and 3, "I agree in general with my friend on the other side of the room," and "So much has been said, and so well said, that I will not occupy the time," and sitting down forthwith. Everybody here would be just as well off, and probably better, for it is from the social intercourse and the spirit of the occasion and the actual sight of the leaders in the profession that we get the benefit from these conventions, rather than from the papers and discussions which are prepared beforehand.

However, conventions must have programs, and programs must have papers, and papers must have discussion, no matter how amicably everybody may agree on all the main points; so I proceed to fulfill my destiny.

I took a course in psychology once under the late Josiah Royce, called "Theory of Knowledge." One of the few things I remember

about it was that our life is necessarily ordered upon a system of presuppositions. That is, we are obliged to take certain things for granted in order to live at all. We take for granted that we shall be alive to-morrow, that the sun will rise and set, and that in order to live in the world we must wear clothes, and eat, and drink; although I must admit that some of these fundamental presuppositions seem to be growing a little less certain at present; for it is a fact that fashionable femininity does not have to presuppose wearing so many clothes; the high cost of living does not permit folk in general to presuppose they must eat as much as they used to; and the amended Constitution does not allow masculinity to presuppose quite what it used to in regard to drinking. However it is true that we have to proceed in life on some presuppositions, and I have always founded my history teaching on a few fundamental ones of my own; truths which I have striven bravely, but not always successfully, to impress upon my children, so that there would come a time when these truths would be presuppositions for them, fundamental propositions which could be depended upon as so firmly imbedded in their apperceptive bases that no doubts would ever arise concerning them.

The first and most important of these propositions has to do with time. It is an attempt to let the dead past bury its dead. Perhaps its most concrete expression may be found in the following assertions: "Columbus is dead. He is not alive now." "John Cabot is dead. He is not alive now." "George Washington is dead. He is not alive now." "George III is dead"—etc. I sometimes wish the school histories would include a picture of the grave of every departed hero with his name legibly engraved on the headstone. The same picture would do for all of them, if they could contrive to change the names. I shouldn't in the least mind if Julius Caesar's inscription were written in plain English. What I need is convincing evidence that the past is past, and goes back a long way. I fear this sounds rather flippant, but it isn't, really; for I think every teacher of history to deaf pupils will bear me out when I say that the deaf need much definite teaching to bring them to a realization of historical periods and the relation between time was and time is.

I agree entirely with Dr. Long as to the lasting effect of early impressions. My father was a great story teller, and a most dramatic one. I was brought up on tales of Colonial times, Indian stories, and family traditions, and they always began with some expression which made me realize their place in the past. "When father was a little boy, 30 years ago;" "When Great-grandfather Lemuel started for Concord fight on April 18, 1775;" "When the last Indians in Milton lived in a hut on Great-great-grandfather John's farm," etc. When I went to ride there were always stories about the early settlers and their doings, and how different the town must have looked then.

All this was history teaching, of course, although not so recognized, and when at a suitable stage I first learned "In 1492 Columbus sailed the ocean blue," I promptly asked "What for?" but I did not say "Is he dead?" for there had been built up in me an apperceptive basis for history which made me know he was dead.

Now, the deaf children I have known have very little knowledge at all comparable with the tradition which almost all hearing children get from their elders in varying degree, and therefore are greatly lacking in the historical sense.

I have always tried to link up my time work in history with both the calendar and the arithmetic. Starting with the familiar "This year," "Last year," "Year before last," and so on, we think of some well-known happening of a recent year. "Three years ago baby sister was born"; "Five years ago Henry first came to school"; "Ten years ago Dominick's family came in a big ship from Italy," and so on. Sometimes I have used a number of old calendars of the appropriate years, because children bred up strictly on calendars, as ours are, have their time sense closely linked with it. To see 12 calendars of 12 past years lying on the floor, one beyond the other, and to realize that each one represents all the days that might have been marked off, and all the months that might have been torn off, in a year gives them an idea within their grasp of the lapse of time. As we go back farther and farther we put events against dates and make one or two sentences. The essential thing is to have the figures of the date mean a period of time to the class. For instance: "1898—Spanish War. In 1898 we had a war with Spain. That was 22 years ago. My father was a soldier in that war." "1873—the Boston fire. That was 47 years ago. My grandfather saw that fire."

When the children have done this sort of thing for some time they become interested in finding dates on pictures and inscriptions, and in reckoning up how many years ago this or that happened. We make rather a point of the limitations of human life, establishing once and for all the fact that nobody can remember events which occurred before he was born, that nobody is alive now who was alive a hundred years ago, that only a man as old as grandfather can remember the Battle of Gettysburg, and so on.

All this work will gradually build up a sense of the past, when events took place which they can learn about in their history, which were true, but which are not happening now; and after long and patient effort it will almost, but not quite, eliminate the "Is Columbus dead now?" of each 12th of October.

Another fundamental presupposition which I try to establish (and this is only another way of saying what Dr. Long has already said), is that people were the same long, long ago as they are now. From this grows the imaginary living in the period in question. Sometimes they dramatize the life of long ago—always in impromptu fashion; and sometimes they live it in imagination and describe it in letters written from Plymouth to a little cousin in England, or from a fort on the Ohio to grandmother in Philadelphia, or from a soldier at Valley Forge to his wife in New England. Whatever the theme, I try to lead them to make a story for themselves which fits a given historical situation. They like to do this, but better than anything else they like to draw serial stories which show exactly how their heroes and heroines dressed and looked and behaved. Our art teacher trains our children from babyhood to do free-hand sketching, and we find the power thus developed of the greatest possible aid in history. (Here is a chance to use the project method if you are interested in it.)

All the results of self-expression, the dramatization, the letters, and the pictures, are crude, of course, and the mistaken assumptions are often very funny, but the children realize two things every time; first, that the names in their books belonged to persons, real live per-

sons, and second, that those persons lived in a world of real people, fathers, mothers, and children, soldiers, sailors, and storekeepers, ministers, priests, and teachers, a world like their world, except that the people wore different clothes and had different surroundings. This brings me to a third set of presuppositions (used in Prof. Royce's sense) which I try to lay down.

In the long, long ago, before 1492, there were no white people in America. Only the Indians lived here. They lived in wigwams, and so on, and so on. You all know the subject matter of these lessons, and it sounds easy. But is it? Ask the history teacher who has tried to plumb the depths. I have found it necessary to get categorical negative statements to the effect that there were no trolleys, no railroads, no churches, and no schools, no stores, no wireless, no airships, no submarines, no ice cream, no toy balloons, and so on. That reminds me that once, after what I considered a most successful lesson on the needs of the Pilgrims, we undertook to make out an informal bill of lading for the *Mayflower*, and the first two items suggested were wireless and barrels of ice cream! You know, it is funny to think of the Pilgrim Fathers with that combination; but it isn't any funnier than some of the things our lawmakers do when they don't quite enter into the situation. And that is what we must try to make our deaf children do—enter into the situation.

What Dr. Long says of the necessity of making all early history teaching center about stories seems to me to be so self-evident as to need no argument. I only wish we had more books which really told stories, instead of strings of anecdotes that often conceal the point within a mass of irrelevant material.

I am glad to find that Dr. Long puts the teaching of what he calls "real history" as late as the eighth grade. To my mind the present-day attempt to bring college methods of teaching. college knowledge of subject matter, and college reasoning and generalization, down into the elementary grades is little short of a curse. If you will read over a sixth-grade course of study, for example, you will often find in it basic ideas from which the pupils are expected to make deductions and inferences which you thought you were doing pretty well to understand when you were a junior in college. It does seem as though when a committee of teachers gets together to make out a course of study, its aim is to show how great is the aggregate knowledge of all its members, rather than what it is common sense to expect the children to understand.

You may say that we teachers of the deaf know better, but every one of us in his heart of hearts knows that he is profoundly impressed by the work of the educational system about him; and, desirous of feeling his work to be in harmony with it, he is consequently under constant temptation to see what he can do about making his pupils understand; for example, the debt the present American civilization owes to Egypt, Assyria, Greece, and Rome. With the telling of stories culled from the folklore or the history of these countries I have no quarrel, provided they are respectable; but to try to make 11-year-old children understand the principles of those civilizations, principles which the people who lived in them never themselves realized as principles, I call inexpedient, not to say unnatural. What is the use of showing 10 and 11 year old children a picture of a

ruined Greek temple, telling them that the Greeks were guided by a passion for perfection, and expecting them to realize it because the lines of the Greek temple are fine? They are not ready for it, and the time is thrown away. I often have occasion to employ little errand boys and girls of the grades where this kind of history is served up, and I can tell you that the cultural reaction is not sufficiently marked to be discernible.

Perhaps I have taught the deaf so long that I underestimate what the hearing can do. That is a common fault with us; but for the deaf I am pretty sure that fairly straight narrative of events, stories of great men and women taught as units, with lessons of patience, perseverance, faithfulness, personal bravery, and patriotism drawn from them—all lightened up by constant impromptu dramatization and copiously illustrated by pictures that are drawn by the pupils as well as furnished by the teacher—if based upon a carefully developed historical sense of time, will result in a better general knowledge of history by the time the pupils reach the eighth grade than a much more ambitious course covering much more ground and dealing too largely with the philosophical aspects of history. Personally, I believe that American history is about all we can manage in elementary schools for the deaf, and that "European beginnings," except where they actually touch our own history, have but little place unless they can be told in stories in the language work.

There is just one respect in which I differ from Dr. Long, and that is in regard to the simplification of ordinary textbooks. I am inclined to defend the process to a certain extent, because the textbooks are usually so badly written. It is not so much that the language is hard; it is that the composition is poor. Very often the authors go out of their way to use what they think is simple language, but they take so little care of their sequence of ideas or events that the child's mind is jerked to and fro until it is bewildered. There is money in schoolbooks. Everybody knows that. So some brilliant historical scholar determines to write a series of histories. He thinks out a good beginning, and then he goes ahead, dictating probably, stringing out his sentences to get in his facts, and never once troubling himself to go back and make over an awkward and uncouth expression. Here is a very fair, concrete example. There is a certain sixth-grade elementary history which I use that starts a chapter with something about the administration of Jefferson.

The author writes six lines, runs up against the Louisiana Purchase, and suddenly remembers that he has not as yet said anything about the settlements in the Mississippi Valley. What does he do? Instead of sacrificing his 10 lines and putting in a chapter on this necessary topic, he leaves the 10 lines, writes 9 pages about the backwoods settlements and life there, and then goes on with a new paragraph which rightfully belongs with the first 10 lines. Now, an arrangement like that is enough to bewilder and mix up any child. I don't mind language being hard if it only expresses the thought which the reader ought to receive, but I do want a story or a piece of history which minds its business, sticks to the subject in hand, and carries it through from a comprehensive beginning to a logical ending; and when a textbook does no one of these things I reserve the right to put the story or the history into decent, not

too simple, prose and give the children a chance to know what they are supposed to be studying about. Then, when they do know, I let them read whatever they can find about the story in three or four textbooks of varying degrees of language difficulty and composition intricacy. Please do not think I want everything written down for the deaf. Not in the least! I want it written up to a fair standard of English.

Let me sum up and I have done.

I have tried to tell you how valuable it seems to me to build up a time sense in history; to make the children realize that live people like themselves lived in the past and made the history they are studying; and for a teacher to be willing to work interminably to make them understand what America was like before the white men came, and what it was like in the early days of our ancestors, so that they may realize what the latter have done. Then I have ventured to share with you my personal opinion of teaching college history in elementary schools, and my very uncomplimentary estimate of the average history textbook. And I am very much afraid that both you and I would be just as well off and a good deal happier if I had followed my own instinct and, with the minister's double, had contented myself in the first place with saying "I agree with my friend on the other side of the room," and had sat down then instead of now.

Dr. La Crosse. I see that the time is passing. We thought we would be through by 4.30; it is now five minutes after 5, so I think if there is nothing further we will adjourn.

(Whereupon, at 5.05 p. m., the meeting adjourned.)

EVENING SESSION.

The convention was called to order at 8 o'clock p. m. by Dr. Percival Hall.

Dr. Hall. Those in the hallway and in the aisles will please be seated, and the meeting will come to order. We have several announcements that will be made at this time. Mr. Pope has some to make first.

Mr. Pope. We want all members of the association to register at the desk downstairs at the other end of the hall, and we want every member here to register, to get the button, and we want you to bring some new member. We want to get some new members.

Now, we are going to have a business meeting of the association in this room Thursday at 11.30, and we want every member present. And don't forget to register.

Dr. Hall. Mr. Rogers asked me to make the following announcement: That to-morrow, immediately after the business session of the convention—that is, at 12.20, or thereabouts—Miss Alcorn, of the Kentucky school, will give a short demonstration with her deaf-blind pupil, Oma Simpson.

Mr. Steed has some announcements to make.

Mr. Steed. We will have moving pictures out on the lawn to-night about 9.15.

The alumni of the Normal Department of Gallaudet College is requested to meet in my office at 9 o'clock Friday morning for just a short session.

Mr. Pach, official photographer of the convention, will be here to-morrow and wishes to take a photograph of the convention and superintendents and principals between 5.30 and 6 p. m.

Dr. HALL. I hate to run in opposition to my good friend Mr. Pope as to membership in these various organizations, but I want to remind the members of the convention, or those who intend to become members, that they still have the opportunity to do so. Everybody here should belong to one of the three organizations. That is expected.

I have the pleasure now of turning over the chairmanship of the meeting to Dr. Yale, who will have charge of the program this evening.

Dr. YALE. In the absence of Dr. Taylor, I have the pleasure of introducing the speakers of the evening. First is Dr. Goldstein, of St. Louis. We will be very glad to hear him.

AN ACOUSTIC METHOD.[1]

By DR. MAX GOLDSTEIN.

The stimulation of the auditory mechanism of deaf-mutes by means of acoustic exercises is a very ancient idea. Archigenes in the first century, Alexander of Tralles in the sixth century, and Guido Guidi in the sixteenth century advocated such stimulation by the production of noises and loud shouting.

In 1761 Ernaud demonstrated differentiation by voice sounds as taught to a selected class of deaf pupils with residual hearing. In 1767 Pereire, using a specially constructed hearing trumpet, claimed that nearly all deaf subjects with residual hearing could be trained to hear words.

Itard was the first to try systematic auditory exercise with a group of deaf-mutes by repeated vocal sounds called into the ear and also by the use of various musical instruments. The observations of Itard were continued by Blanchet and Deleau in France and by Beck, Jager, Wolff, and Frank in Germany. Toynbee, in England, emphasized the importance of auditory exercises for all deaf pupils with residual hearing. Wilde indorsed the opinion of Toynbee. After an apathy of 20 years, American teachers of the deaf stimulated a revival of this subject. Gallaudet, Currier, Gillespie, and W. E. Taylor carried on their observations with groups of the semideaf.

Alexander Graham Bell, Gordon, and Clark investigated the work of Itard and commended the idea of awakening the auditory apparatus by means of sonorous vibrations.

To Urbantschitsch, of Vienna, belongs the credit for extensive research and active accomplishment in this field. In 1893 he gave the first practical public demonstration of his work with pupils of the Döbling State Institute for the Deaf before the Medical Association of Vienna. It was my privilege to be in Vienna during the period of development of this work at the Austrian State School and at the demonstration of Urbantschitsch before the Medical Association of Vienna, and it was the impression gathered at this time and the convincing evidence of practical results that actuated me to further research in this field.

In April, 1897, I demonstrated the results of two years' work by means of acoustic exercises before the American Academy of Ophthalmology and Oto-Laryngology in St. Louis.[2] This demonstration was presented to my own otological colleagues. It was a difficult problem to arouse their interest and practical cooperation. Perhaps an earlier recognition of the importance of an acoustic method would have been effected had such a demonstration been presented to a convention of teachers of the deaf. Within the past few years, however, there has been an awakening to the importance of this question and a wave of earnest inquiry is surging through the land. Now the medical profession, as well as the teacher of the deaf, is in a receptive mood.

---

[1] Author's abstract of an address delivered at the Joint Convention of American Teachers of the Deaf, Mount Airy, Philadelphia, June 29, 1920.

[2] The detailed report of this demonstration appeared in the Laryngoscope, June, 1897 (vol. ii, no. 6).

Another epoch in our activities with acoustic exercises was created with the founding of the Central Institute for the Deaf in St. Louis in 1914. Even though our classes have been comparatively small, our opportunity for study and observation was unrestricted and we planned and plodded toward a better understanding of this special training. The principles and practice of acoustic training have always impressed me as being thoroughly sound and scientifically logical, and as my association with the actual pedagogy of the deaf became more intimate, I began to wonder why such a method was not more generally applied, why institutions and teachers throughout the land were not more enthusiastic about it, and why the unusual and satisfactory results of Urbantschitsch abroad, and of the work at the Wright Oral School and of the Central Institute for the Deaf at home, could not be duplicated by other teachers and many groups of pupils. After a careful analysis of every factor, I concluded that the causes were: Lack of information of this work by the teaching profession; lack of available literature; and, finally, lack of a practical and detailed working system.

The purpose of this paper is to place for impartial consideration the adoption of an acoustic method by presenting a careful analysis of our observations and experience, by submitting literature and references, and by offering a systematic series of exercises with charts and directions so that every teacher may have data at hand for an acceptable and comprehensive plan of work.

The literature of otology is voluminous in its presentation of nerve deafness and of the physiology and pathology of the nerve-perceiving apparatus of the ear. The most marked advance in this field of investigation has been made during the past 10 years in the definite comprehension of the physiological and pathological status of the labyrinth and in the problems of cerebral localization. These scientific principles, together with a thorough comprehension of the physics of sound and the theories set forth by Helmholz of the functions of the cochlea, are essential to a liberal understanding of the questions involved in the application of acoustic training.

I have attempted a classification of nerve deafness into four groups, each group representing a different pathological and a different prognostic value as studied in the light of modern pedagogy and psychology:

Group I. Deafness due to pathological changes in the peripheral or end-organs of the ear; the tissues of the auditory centers in the brain may be normal. (Labyrinthine.)

Group II. Deafness due to pathological changes in the substance of the auditory nerve in its course from the internal auditory meatus to the base of the brain; the sensory end-organ in the labyrinth may be normal. (Central.)

Group III. Deafness due to congenital absence of a part or all of the cochlear nerve in any area of its distribution; the auditory nerve trunk and nerve center in the brain may be normal. (Labyrinthine.)

Group IV. Deafness due to absence or arrested development of the auditory nerve in its trunk or central location in the brain; the sensory end-organ may be normal. (Central.)

We may conclude that in Groups I and II the application of music stimulation may reeducate auditory nerve cells and fibers and overcome the paresis acoustica or other toxic or inflammatory pathology which has occurred in these tissues by constitutional invasion. It may even be possible in Group III, where a healthy central auditory apparatus and a congenital absence or differentiation of the peripheral or acoustic mechanism exist, to develop some other avenue of conducting sensory impressions by special training.

If my classification could be definitely corroborated by careful functional tests, it would make selective pedagogy practically possible in these cases.

From our practical observations with the acoustic method, we are justified in the conclusion that not only semideaf pupils but those heretofore classified as totally deaf may exhibit definite progress by acoustic training.

In planning our course of training of the acoustic method in the Central Institute for the Deaf, we have directed that every pupil in the oral school shall receive daily systematic training of this character, irrespective of the degree of deafness, the age of the pupil, or scholastic status. We have devised individual record charts, and every step in the progress of the individual pupil is here noted. We believe that a careful analysis of these charts and a few years more of experience will lead to a comprehensive working system, enabling all instructors to be placed on the same pedagogic plane and all deaf pupils to be given equal opportunity for development by acoustic training. It is my sincere opinion that the main reason for the many unsuccessful at-

tempts and indifferent results in the use of the acoustic method is the desultory, aimless, and unsystematic form of procedure which has discouraged teacher and pupil alike and given rise to many misconceptions and misunderstandings about this special pedagogy.

There will be disappointments in the results, there will be imperfections in the practical work of this system, but we ask your indulgence and your cooperation so that we may study together the many problems that must arise and be solved before a thoroughly feasible working plan can be perfected.

There has been much misunderstanding concerning the acoustic method of training the deaf. In the literature of the profession we find mention of "Oral method," "Auricular training," "Oral gymnastics," "Acoustic exercises"—titles which may lead us astray by the manifold interpretations and confusions of terms. If the work here presented is regarded as of sufficient importance and dignity to justify its taking a place with other pedagogic systems, we desire to term this the "Acoustic method."

The principles of the acoustic method are based on sound vibration and sound interpretation through the auditory nerve apparatus, both peripherally and centrally considered. Let us assume the case of a totally deaf child as the most exacting test to which the acoustic method may be subjected. The pupil has been examined by a competent otologist conversant with all the modern principles and theories of auditory function. The pupil has been tested by every musical agent known, to determine the presence or absence of an acoustic impression. He does not hear the human voice, tuning forks, the piano, organ, accordion, gong, clarinet, or other reed, wood, wind, or stringed musical instrument in any pitch. He does not react to the tests to determine the presence of a functioning vestibular apparatus.

We conclude that this pupil, at the time of making such functional test, is totally deaf, at least as far as the response from his peripheral acoustic mechanism is concerned. We assume that the pupil has been taught by lip reading and speech the elementary vowels, or at least some of them. Or we may even occasionally begin with a young pupil who has not even had this preliminary training.

We classify our plan of work into (1) passive education, (2) active education. We term the process of stimulation with musical instruments, a stimulation received by the child without conscious effort on his part, as passive education. To simplify our work and concentrate our observations we employ two musical instruments at the Central Institute—a specially constructed harmonium for passive education, the human voice for active education. The accordion used is a duplicate of the one constructed for Urbantschitsch over 25 years ago for the acoustic training instituted by him and used with pupils at the Austrian State Institute for the Deaf at Döbling. This harmonium has a range of six octaves in the musical scale.[3] The tone limitation is from contra F to E.

The three dimensions of sound—volume, pitch, and timbre (quality)—are always kept in mind in acoustic training. Volume of sound is increased or diminished to fit each given case. Pitch is developed at the earliest possible period. As soon as a child responds to a musical sound vibration an attempt is made not only to develop perception of a second sound, but also to formulate in the auditory and mental response a differentiation of pitch. Timbre or voice quality, is an important factor in passive education, and the employment of various musical instruments prepares the pupil for a perception and differentiation of the various timbres of the voices to which he is later subjected in active education and when brought in touch with the voices of other teachers.

All pupils trained by the acoustic method should be given at least 10 minutes' instrumental stimulation daily in addition to the acoustic exercises for developing appreciation of spoken language. These instrumental vibrations should be continued throughout the entire course of acoustic training, for by their use the entire range of the organ of Corti is constantly subjected to stimulation and inactive or dormant tone islands awakened to greater potentiality.

It is difficult to make an accurate test of residual hearing, especially when an instrument producing very intense vibration is used. Older pupils will differentiate between tactile and auditory impressions, but the younger ones can

[3] A special harmonium of six octaves is now being constructed, the notes of which may be individually or collectively conducted to the ear with a volume, quality, pitch, and duration varied and measured at will. A further detailed description of this musical apparatus will be published shortly and schools and teachers will be advised where it can be obtained.

rarely do this. Intense tones are often conveyed directly to the auditory nerve through bone conduction and are received as tactile impressions rather than as auditory impressions.

After the residuum of hearing has been sufficintly developed to enable the deaf pupil to hear the human voice, we begin the process of active education. This training has as its fundamental purpose the stimulation of the auditory end organ and the development of mental impressions to the degree required in differentiating intensity, pitch, tone, color, and duration of vocal sounds; then to a comprehension of vowels, consonants, words, phrases, and sentences. We divide active education into (*a*) analytic form and (*b*) synthetic form.

Analytic exercises are composed of single vowels and groups of vowels and various combinations of syllable drill. Language is thus separated into its component parts. Such exercises are given the pupil in order to develop actual auditory perception without the aid of an association of ideas.

Synthetic exercises are used to develop a comprehension of spoken language. Words, phrases, sentences, and stories comprise these exercises. Words are classified in family groups, as to initial consonants, accented vowel, and number of syllables. Phrases and sentences are broken up into syllables, given with prolonged tone at first, then shortened to normal duration. As many rhythms as possible are applied to each phrase and sentence. Various accents and inflections are also given.

Analytic exercises should precede synthetic exercises in the case of the pupil who has a sufficient auditory residuum to hear voice when training is begun, and also in the pupil in whom perception for voice has just been developed by passive education. It is through the analytic exercises that the pupil's attention is focused on definite acoustic impressions and the hearing power stimulated independent of word imagery. Sufficient practice in analytic exercises will overcome delayed and incorrect responses to spoken language and create perception for actual acoustic impressions. It is much easier for the pupil to interpret synthetic acoustic exercises as the association of ideas naturally aids in such interpretation. It will be found, however, that a neglect of the analytic method and overdevelopment of the synthetic method will produce an end result of auditory inaccuracy and physiologic inefficiency.

Dr. GOLDSTEIN. Kindly indulge us a moment longer; Miss McKenzie will demonstrate the charts which have been presented in conjunction with this paper.

Miss MCKENZIE. As Dr. Goldstein explained, we have given instrumental stimulation to each child in Central Institute regardless of the residuum of hearing. Fifty per cent of these children had no perception for tones within the range of the human voice until after they had received several months of instrumental stimulation. When tests show the residuum of hearing to be sufficiently developed for the child to hear the human voice, active acoustic education is begun. When active acoustic education is first begun it is sometimes necessary to use an audotube to intensify the voice. However, it is not advisable to continue the use of the tube, as we know children who have no residuum of hearing within the range of the human voice can be taught to interpret vowels produced with much volume through the audotube by the tactile sense alone. We use the megaphone almost exclusively for amplifying the voice. The child is not allowed to touch the megaphone in any way.

Dr. CROUTER. Miss McKenzie, won't you tell us the condition of that pupil's hearing before you begin any of this sort of training?

Dr. GOLDSTEIN. This young girl was the first pupil taught at the Central Institute. She came to us six years ago. When her hearing was tested we found that loud, sustained individual vowels, when called into the left ear elicited some sound perception, but there was no ability to differentiate one vowel from another. The only word that seemed to get a response of indefinite character was the word

"Mamma." The child's attempt at speech was a confused and unintelligible babble. She was 7 years old when these first tests were made. There was no response to any other functional hearing tests at that time.

This young girl is a practical example of the degree of the successful application of our acoustic work. She came to us six years ago babbling unintelligibly. She was unable to respond to any of the functional hearing tests made at that time. She seemed to have, however, some vowel perception, but not enough to differentiate one vowel from another even in the same pitch. In one more year's training she should be ready to receive practically all of her education through her ear entirely by use of loud conversational voice. In other words, such a child would formerly have been regarded as congenitally deaf and without residual hearing; to-day, after six years of acoustic training, she might almost be classified as a very hard of hearing pupil, and able to take most of her instruction as do normal pupils, but with more individual assistance of the teacher and at close hearing range.

Coming up on the train this girl met a normal hearing young girl of about her age, and it was a liberal education to see our pupil, born deaf, in conversation with a normal hearing girl of her own age, and she was doing most of the talking. That was a better demonstration than any that we could arrange for you in conventional form. [Applause.]

Miss McKenzie. Of the 56 children in school this year, 8 have sufficient hearing to receive synthetic acoustic education; 44, active acoustic education; and 4 receive passive only. The method of procedure in analytic acoustic education is as follows:

(1) Taken singly and in groups, the vowels o-e, ee, a(r), oo, and aw are first taught with a singing, sustained tone, as the sound vibration so produced makes possible a more definite stimulation than the spoken tone, and we strive for the greatest amount of continued stimulation at this stage. When the child can interpret these vowels without error, the duration of tone is gradually shortened to that of the normal vowel as used in connected language.

(2) The diphthongs Oi, ow, i-e, a-e, u-e are given singly and in combination with the normal speech duration, and the volume of voice regulated according to the need of the individual child.

(3) It is sometimes difficult to teach the child to respond only to tone impressions and not to the tactile impression. In order to overcome this difficulty the vowel o-e is called directly into the ear and the child allowed to feel the breath impulse. Next o-e is produced without voice, the teacher being especially careful to give the same amount of breath impulse with nonvocalized vowel as with the vocalized. The child feels breath impulse of nonvocalized vowel and is taught to tell when vowel is produced with voice and when without. It is in this way that the child is taught to listen for and respond to tone impressions.

(4) From now on we try to prevent the child from receiving impressions tactilely. In order to do this the teacher must not allow the child's body to touch her, must not place her own hand on the child, must either hold a piece of cardboard between her mouth and the child's ear, or speak through a simple megaphone.

(5) Two important points:

(*a*) To teach the child to interpret the same vowel on different pitches.

(*b*) To so give these drills that the teacher may be sure the child is interpreting the vowel as to its individual intensity, tone, and color, and not as to any particular pitch on which the teacher may produce individual vowels.

I will now demonstrate with Elizabeth. I have worked with Elizabeth for two years. Previous to that time, Dr. Goldstein had worked with her for three years and had developed the residuum of hearing in the left ear to the point where she could interpret connected language. I found only perception for voice in the right ear, and no ability to interpret even single vowels. In June she completed the analytic acoustic exercises and synthetic acoustic education will be begun next year.

(Miss McKenzie demonstrated with pupil.)

The teacher should adopt the lowest note on which she can produce a good resonant tone as her tonic. She begins by producing o=e on this pitch. After the child positively responds to the vowel upon this pitch, the teacher immediately begins to develop a perception for changed pitch by producing o=e on the octave of her tonic tone. Next she gives the vowel alternately on low and high pitch, thus giving the child the opportunity to compare o=e produced on the two pitches. In the same manner the intervals of the fifth and third are developed. A relative repetition of pitches produced by the teacher is required of the child, and can be obtained from all but the extremely deaf. We do not wait, however, to secure this relative return of pitch before taking up the second vowel. We take up the second vowel as soon as the child can interpret without hesitation the vowel o=e.

(Miss McKenzie proceeded with the demonstration:)

Ee is the second vowel compared with o=e. There is the greatest difference in intensity and tone color of these two vowels, hence it is easier for the child to interpret and compare o=e with ee than with any other vowel. O=e will be produced on the tonic tone the teacher has adopted, and then ee on the same pitch. Sufficient practice is given for the child to be able to differentiate between the two vowels. The next drill is given for comparison of o=e and ee on the different pitches, as described in the previous paragraph.

Other vowels listed in first step of the chart are taken up one by one and compared with each vowel the child already knows. As stated in (1), only o=e, ee, a(r), oo, and aw are used on different pitches.

When the pupil can interpret the single vowels, they are combined into groups of two, three, and four. The same procedure is followed as with the single vowels—that is, they are taught on the same pitch and then on different pitches. We begin work for accent in the vowel drills.

(The demonstration continued.)

When teaching the third and fourth steps of vowel drill do not stop and repeat one or two vowels if the pupil fails to repeat accurately. We are trying to train the visual memory as well as the

auditory center, and must keep constantly in mind the fact that each vowel or group of vowels has a decided tone coloring of its own. When we give o=e, ee, a(r), oo, and aw, and the pupil fails to repeat all vowels correctly, we do not change the combination or simply repeat one or two of the vowls. If we do this we change the whole tone picture and do not teach the pupil the original group of vowels. Give an entirely new group, if necessary, to secure renewed attention, but go back continually to first group until the child can repeat.

After the vowels have been taught in all combinations, syllable drills are then taken up.

In the syllable drills each consonant is taken up in turn with the different vowels. In the first step of syllable drills the consonant is placed between two vowels, as consonants between vowels are more easily heard than at the beginning or end of a word. These drills are given in groups of three to prolong the auditory excitation, to give the pupil the advantage of receiving the one auditory impression more than once before being asked to interpret, to develop continuity of speech, and to be used as drills for changed inflection and accent.

(The demonstration continued.)

Fundamental drills as just outlined to you are given each child, regardless of the degree of auditory residuum. This drill work is as essential for the accurate development of the so-called semideaf child as for the extremely deaf child.

Dr. YALE. I am sure Dr. Goldstein does not need us to tell him that we very deeply appreciate his patience in giving us all this marvelous piece of work, not only for this evening but for the time to come, for it is going to be ours in printed form later and we are going to have a chance to study it, you know. I think we all feel deeply indebted to him.

The next on the program is not Dr. Wright, as the program originally stated, but Dr. La Crosse, who will read Dr. Wright's paper.

Dr. LA CROSSE. I know you are all tired. Dr. Goldstein told you that the auditory nerve stimulated for 10 to 15 minutes gets tired. [Laughter.] I wish you would bear in mind the conditions in the schools from which you come as I read this paper of Mr. Wright's, because he wrote with that idea in mind, and as you know he is familiar with the conditions in a great many of the public residential schools, and has asked me to impress upon you the title of his paper which is——

TEACHING A HEARING VOCABULARY.

By Dr. JOHN DUTTON WRIGHT.

There are three purposes for giving auricular training to the pupils of a school for the deaf:

1. To increase the ability to perceive sound.
2. To train the brain to associate ideas with the sounds of speech that are perceived, and so to understand spoken language by means of the ear.
3. To improve speech..

For the first purpose we can use mechanical or electrical apparatus, as well as the voice, for producing sound. For the other two purposes we can use nothing except the spoken word.

We must discriminate carefully between the first and the second purposes. Success in training a deaf person to comprehend spoken language by means of

the ear may easily give the impression that the actual perception of sound has been improved when that may not be true. Efforts toward the improvement of hearing are merely preliminary to the further training that is necessary for the use of this hearing in the comprehension of spoken language.

My personal experience and observation during the past 30 years have led me to the conclusion that auricular training, either with the voice or with sound-producing apparatus, rarely secures any valuable improvement in the hearing; yet I am convinced that auricular training by means of the spoken word would give about one-third of our pupils the power to understand spoken language by ear and would improve the speech of at least one-fourth of them.

Our pupils have so much more to accomplish during the educational period than the pupils in schools for the hearing, that we should use their precious time only for the purposes that are reasonably sure to secure results. Therefore I am in favor of laying much more stress upon auricular training by the spoken word than by means of any sound-producing apparatus, mechanical or electrical. I will, therefore, confine my own paper to the discussion of auricular training for the purposes of teaching a comprehension of spoken language by means of the ear, and the consequent improvement of speech.

As the natural order of human development is comprehension first and expression second, I will take up these purposes in their order.

We all know that merely to hear the sounds of speech is not enough for comprehension. If it were, there would be no necessity for the labor involved in learning foreign languages. We know, to our cost, that our brains must receive a long course of training in the association of ideas with the sounds conveyed to them by the ear before we arrive at an understanding of spoken language. We also know that, when once our brains have been trained to associate ideas with the sequences of sound which we call words, we can understand what is said, even if our ears are not able to catch all the sounds perfectly. When listening to conversation or discourse under difficult conditions, we are able to get the idea, though we hear the speaker imperfectly. Our knowledge of the language enables us unconsciously to supply much of what we failed actually to hear. If the same speaker should speak with precisely the same degree of imperfection in a language less familiar to us, we should not be able to get his thought.

In other words, the comprehension by ear of spoken language is much more a matter of brain training than of sound perception.

Many tests and observations have convinced me that about one-third of the pupils in our schools for the deaf still possess, when they enter school, a sufficient power of perceiving the sounds of speech to enable them to learn to comprehend spoken language if they could receive the proper mental training. They do not hear enough to learn in the ordinary way and at the ordinary conversational distances of daily life, and so have reached school age without acquiring either language or speech, and they properly belong in a school for the deaf.

This situation arises from the fundamental law of sound transmission. Sound is conveyed from its source outward in all directions by spherical air waves. The force of these spherical waves varies inversely as the square of the radius of the sphere, and this radius is the distance from the source of sound to the point where the wave impinges upon the sound-perceiving apparatus. Put in the language of the street, a sound is four times as loud at half the distance, sixteen times as loud at a quarter of the distance, sixty-four times as loud at an eighth of the distance, etc. Expressed still more concretely, a word spoken with a certain volume or pitch an inch from a deaf child's ear will sound one thousand two hundred and ninety-six times as loud as it would if spoken 3 feet away.

Many a little child of 7 enters our schools for the deaf with no understanding of language, who might have practically the same vocabulary as his hearing companion of 7, had the same language that was addressed to his companion at ordinary conversational distances been addressed to him at the distance of an inch or two from his ear. He might still be a proper candidate for a school for the deaf if that school was conducted as it ought to be, but what a tremendous advantage he would have over his situation at 7, with no language and without the mental development that can be secured only through language.

Would that it were possible to put this knowledge into the mind of every parent of a deaf child when that child was 6 months old. If we could only get every physician in the world to realize this fully, it might be possible to get the fact to the family of the deaf child in time to benefit him. At any rate, let us all do our utmost to spread the idea as widely as possible.

But our immediate problem as teachers of the deaf is to begin the process of training this little fellow's brain as soon as he comes under our care, and to recover, so far as that is possible, the years that have been lost.

I take it for granted that every known means, medical and surgical, for the improvement of sound perception has been employed with the child; that the ears are clean and healthy; that there is no obstruction of the Eustachian tube; that his general physical condition is as good as it can be made. What, then, shall be our procedure as teachers to train the child's mind to utilize to the fullest extent in the comprehension of language the power of sound perception that remains?

It is a very simple process and one that any teacher or any parent can carry out by means of patience, persistence, and enthusiasm. The process consists first in directing the child's attention to sounds, and second in gradually building up a hearing vocabulary.

I have several times outlined the process as conducted in my own school, but it may be well briefly to repeat that outline here, and then to illustrate it with some pupils. We will suppose that the pupil with whom we are to work has the smallest remnant of hearing that it is possible to utilize for comprehension of language. Of course, the greater the amount of hearing, intellect being the same, the easier is the problem.

Not having been accustomed to get anything helpful through his ears, he has probably come to ignore any sounds that may reach him. He has thus become psychically deaf as well as physically deaf. We must first overcome this psychical deafness and secure his attention to sound. In other words, we must induce him to listen.

We begin this by giving him an opportunity to discriminate between two or more sounds and offering him an inducement in the shape of some reward for attempting to do so. It is convenient to use for this initial stage a police whistle, a bell, the clapping of hands, and the shouted sound of *ä*.

A record is kept of his success in determining which sound is made, and if, after a period varying from a day to a month, he can uniformly succeed 80 per cent of the time, we go on to the attempt to distinguish between three words of widely differing vowel sound, but of the same length. The three words *car*, *comb*, and *key* serve very well, as they can be readily associated with the objects and begin with the same consonant sound.

We do not harp so long upon any single group as to create a wearied distaste, and we encourage and reward with sufficient liberality to secure willing effort, for nothing can be done without the cheerful cooperation of the child. If his attention wanders and his interest wanes after we have tried one group of words, we can usually arouse his interest again by substituting some other group that will serve our purpose just as well, as for example, *eyes*, *nose*, *mouth*, or his own name and those of two of his playmates.

The next step, naturally, is to use three sentences, such as, "Open your mouth," "Shut your eyes," "Clap your hands." When once he finds himself able to distinguish between three sentences, it is easier to maintain his attention, and his progress is usually more rapid. But so many elements enter into his success that one must not be discouraged if he fails at intervals. He may be out of condition physically at the moment. He may be tired. He may be diverted by something going on around him or by thoughts of something he has been doing or is going to do so. The concentration of attention necessary to success in the beginning is so great that it is difficult to secure it invariably or for more than a few minutes at a time. In the case of the little ones, five minutes is long enough at a time, but the exercise can profitably be given at least twice a day.

The distance from the ear, the loudness and pitch of the voice, and whether a man's voice or a woman's is better heard must all be determined by experiment in each individual case. It is also necessary to learn which is the better ear. Every effort should be made to develop the power in each ear, and the effort should be abandoned only after many and recurring trials. The records of the trials for a week do not by any means give a reliable basis for judgment as to the hearing possibilities possessed by a pupil, but the average of careful daily records kept for a month or six weeks may be accepted as indicative of his possibilities at the moment. If this average success is so small that it seems wiser to use the time for something else, a fresh set of tests should be made when he is a year older. I have sometimes been able to get excellent results several years subsequent to an unsuccessful series of efforts. This is usually

due to greater maturity and understanding and desire on the part of the pupil as he grows older, together with an increased power of concentrated attention.

It is rare that the best results can be obtained by giving the exercises more than an inch or an inch and a half from the ear, since the power of the impression decreases so rapidly with increased distance.

Naturally the combined action of the ear and the eyes improves the accuracy with which sounds are comprehended, and especially the accuracy with which they are reproduced For this reason, it is very helpful to conduct a portion of the practice in front of a mirror, so that the child can see the mouth of the speaker, even when it is very near the ear. About half the time, however, he should be made to depend upon his ear alone for compehension, though most of the time devoted to having him reproduce by his own speech the sounds he hears can best be spent with the aid of the mirror.

For the sake of the child, for the sake of the teacher, since her work will be rendered easier and her results more satisfactory, and for the sake of the school, since results spell success, there should be a careful test of every pupil in the school, and those who are found able, after three or four sessions of five minutes each, to distinguish with 90 per cent of accuracy between the three words "car," "comb," and "key" should be provided with a fixed time, not less than five minutes a day, during which they should receive a series of progressive exercises in the comprehension of words and phrases by ear. They should have other periods when the same exercises are given them while facing a mirror with the speaker's lips an inch from their ears, and they should attempt to reproduce the words and sentences as they see and hear them.

Short phrases and sentences of practical use can very early be substituted for single words; such sentences as, "Where is your hat?" "Who was that?" "Put on your cap," "Shut the door," "Wash your hands," etc. Sentences are often easier to get than detached words, and they are much more interesting.

The teacher must not forget that many repetitions are required before any word or sentence is really incorporated in the vocabulary of a person. It is to be hoped that he or she has at some time attempted to learn to speak and understand a foreign language, in which case it will be known how many times it was necessary to hear a sentence before it was instantly comprehended and how very many more times were required before he or she could speak the sentence fluently and correctly. Having this in mind, the teacher will be willing to present the same phrases and sentences to the pupils very many times before being discouraged when the pupil fails to recognize or to reproduce correctly.

Do not forget that comprehension must precede expression; that you and I learned first to understand and considerably later to speak, and that our pupils, in this matter of hearing, should gain a comprehension of heard language before they are asked to utter the words and sentences themselves. But when once a hearing vocabulary has been acquired the spoken expression will greatly improve.

Dr. La Crosse. While there will be considerable discussion on these two papers, because as I have heard Dr. Goldstein's paper it seems to present a slightly different view of the subject than we take, yet we are all striving toward the same end, and the greatest difference that I see here is that while in the case of the girl with whom they gave the demonstration with the right ear they are to continue the exercises some time longer—and they have used similar exercises for some time in the past—if we had had her we would have attempted long before this to teach her language through the right ear, and from what I saw of her I should say that right now in a week of 10 minutes twice a day we would be able to teach that girl possibly 25 or 30 expressions which she would understand, such as the expressions that Dr. Goldstein was giving in the left ear. The point on which we differ is the length of time that we would use these preliminary exercises. We are concerned principally with teaching the hearing vocabulary.

Dr. Yale. Mrs. Hurd will take the place on the program assigned to Miss McKinley. Mrs. Hurd, of Providence.

Mrs. HURD. Dr. Goldstein and Dr. Wright have covered the subject so very fully that there is little I can say further.

Several years ago, in conversation with a prominent aurist, he told me that in his opinion nearly all deaf persons, even those regarded as totally deaf, have, as he termed it, "islands of hearing." Perhaps if we could determine in the first place the island of hearing each of our pupils possessed we might save time in training—in their auricular training. He claimed that rarely was one so completely deaf that no sound at all could be perceived. From my experience with deaf pupils I have not proven this to be the case, but I am certain that many of our deaf pupils whom we regard as without any perception of sound at all can be made to perceive sounds through careful and persistent training.

Undoubtedly the musical vibration work that we are doing is an important factor in auricular training. Either through this sense of vibration, if I might call it that, or through the awakened and educated sense of hearing, or both, I am sure a better knowledge of what sounds are is gained. The sound of the piano and of the drum materially quickens the ability to hear in some cases, while this confusion of sounds renders others unable to hear at all. You all know that I am a little deaf myself. When I take a railroad journey or travel in a noisy street car I am able to hear conversation very much better than when everything is quiet around me, and when the drums are beating for our pupils to march out of school in a fashion to make visitors wonder that we can endure the racket I am able to hear low conversation very much better than at other times.

Dr. CROUTER. What is that?

Mrs. HURD. Well, I leave that for wiser minds than mine to explain. I speak of it as an interesting fact. We might prescribe a long railroad journey for hard-of-hearing people.

As Dr. Wright stated, after the pupil is able to perceive sounds through the ear he must be trained to understand what he hears. I have found that a very little hearing may be educated to a helpful degree—helpful to the pupils in their language and in their speech.

One point that Mr. Wright mentioned in this connection is that a pupil not being accustomed to get anything through the ear ignores any sounds that may reach him, and, as Dr. Wright adds, he must be taught to listen and then taught to interpret what he hears.

As we have as yet found nothing that will take the place of hearing in the education of our deaf pupils, and we have not found that they can get along as well with four senses as they could if they possessed five, it is our duty, I think, to make the most of any portion of that fifth sense which the pupil may possess, or which may be awakened. It is a very important factor in their education, which we have overlooked sometimes, I believe.

Dr. YALE. Next on the program is Mr. E. A. Stevenson, of the New York institution.

Mr. STEVENSON. Miss Chairman, we have listened to two admirable papers, but I doubt very much if we will have time enough to go into a full discussion of them, but I do want to say that through my two years of experience with this particular kind of work I have not had time to go into the scientific study of it, and therefore my discussion will be largely based on my own practical experience secured in the classroom.

In my two years' work I have been firmly convinced that there should be more auricular work done for the deaf than there is. I don't mean to say that we will make the deaf hear. That is an impossibility. Nevertheless, there are many of our supposedly deaf children in the schools that have passed through their entire school life having some sound perception, or perhaps a remnant of hearing that has never been used. This is where the injustice is being done. I have seen it in the school and I have seen it outside the school, and I honestly think that something should be done; and from the little experience that I have had I agree in toto with Dr. Wright's paper. He has had more experience; yet I think he is too conservative. He states that one-third of the pupils in the institutions possess some degree of hearing—I would venture to say at least 40 per cent—sometimes I would like to increase that a little and say 45 per cent. I base that largely on outside investigation in some of the homes of deaf children in New York.

It has been my good fortune to go about hunting up deaf pupils, and I discovered in these examinations—which, by the way, were not scientific examinations, but merely tests to learn whether or not they could hear sound—I discovered that an average of 4 out of 10 had some sound perception. Therefore, I tried to induce Mr. Gardner to establish a small class in order to do something for these children in the way of developing their hearing.

We know that auricular training is 200 years old. We know that; but still it is practically new. We are walking on dangerous ground and I think we have to feel our way before making final decisions. We should aim to obtain practical results and always endeavor to do the best possible for the child.

Now, I agree in a great deal of the work that Dr. Goldstein has shown, but there are a few things that I might not adopt. Now, I may change my ideas next year—I don't know. But at present I would say that I would venture to use those syllable drills, and those vowel combinations for testing, and develop the hearing as far as possible with the unaided voice—that is, in our work with the small child. Now, you may not agree with me on this point.

In connection with the use of apparatus, I am not a staunch advocate of the use of aids in small children. Use the unaided, natural voice at all times where possible. I had a boy that had been in the first grade; he had no hearing—that is, the teachers thought he had no hearing, but I discovered, after testing, that he had residual hearing. I don't say sound perception; I say residual hearing—that is, he understood words that had at one time been familiar to him in his hearing vocabulary, and this boy in a year and a half went from the first grade to the fourth grade, and I lay it largely to this auricular training.

At first I thought that we could have an auricular department made up of auricular classes taught by auricularly trained teachers who would give the deaf their entire education through the ear. But after two years work, I have come to the conclusion—still again I say I may change—that that is the wrong idea. We can give them mental development. Dr. Wright did not mention that, and I thought that was the chief purpose of auricular work, the mental development that the boy receives, or the girl receives from this work.

Let the degree of hearing supplement his lip reading. At first I thought that we should give his instruction through the ear entirely, but now I feel that we should allow half an hour a day perhaps—that is the way I had carried on my work in the class—a half hour a day of that training, and then stop there and carry on the boy's education through lip reading, because he has a very short time to cover his school course, and every hour is valuable. We couldn't go on with a great deal of that development and allow the boy's education to suffer—that is, I would feel that way. The idea is to give him that mental development, give him the association of ideas so he could understand spoken language. It would better his language; it would better his command of English, reinforce his command of language; it would supplement his lip reading, and just as Dr. Wright stated it would better his speech.

If you look up your Annals, you will see that only two per cent of all the deaf children in the United States, in State schools, are being trained by the auricular method—2 per cent—a little more than 2 per cent.

Perhaps we have overlooked this duty of ours. Dr. Goldstein feels that there are 40 per cent—did you say 40 per cent?

Dr. GOLDSTEIN. We claim 100 per cent, Mr. Stevenson. We train 100 per cent by auricular work.

Mr. STEVENSON. You have all auricular pupils?

Dr. GOLDSTEIN. I didn't say that, but we give 100 per cent of our pupils auricular training.

Mr. STEVENSON. What I mean, in your investigation, how many of the deaf children do you think are auricular pupils?

Dr. GOLDSTEIN. I don't know.

Miss JULIA CONNERY. We have six.

Mr. STEVENSON. In how large a class?

Miss CONNERY. Not in a class. We have three in one class and three in another.

Mr. STEVENSON. How large a school do you have?

Miss CONNERY. Six out of fifty-five.

Mr. STEVENSON. Well, that is 10 per cent. I suppose you get a larger percentage in the larger schools. Dr. Wright, I think, said 33⅓ per cent. Well, I suppose we would be safe in saying 25 per cent of the deaf. Yet, I am sure the percentage is greater.

Miss CONNERY. Does Dr. Wright, then, give all the 30 per cent auricular training?

Mr. STEVENSON. I don't know.

Dr. LA CROSSE. I can answer that. In our own school to-day during the latter half of the year we gave auricular individual exercises daily to 65 per cent of our pupils. At the beginning of the year we gave the exercises to 100 per cent. If they do not profit by it, we drop it and take it up the next year or the second following year; and where we started with 100 per cent we ended with 65 per cent.

Mr. STEVENSON. Let us say, then, to play safe, that 25 per cent of all the schools—well, say the deaf children of our schools—have some sound perception or remnant of hearing, or have residual hearing. Now, I wish Dr. Goldstein and Dr. Wright had explained the terminology. What are we terming a child that has sound perception? Here is a child that has residual hearing, or here is a child that has

a remnant of hearing; I know some people will say that child has sound perception, that that child hears. Now, I wish—I think all the teachers would wish, since we are getting interested in this work—that those gentlemen would make our terms and explain those terms so that we can work in harmony and work along the same paths, because if one teacher understands sound perception as residual hearing and another understands that residual hearing is actual hearing, we will never succeed in arriving at the same purposes.

Then, again, I wish that Dr. Wright and Dr. Goldstein had told us just how this work should be carried on; that is, do they believe in concert work? It may be all right in their schools because they are working under different conditions and with smaller groups, but most of us are dealing under less favorable conditions and with larger numbers. Shall we work in concerted action or shall we have, as we have in many oral departments, a specially trained teacher, to whom we can send these "supposedly deaf" at different times of the day for 15 or 20 minutes for this auricular training? Those are the vital points that come to my mind in the little time that I have had to do with this important work. They ought to be cleared up before we start on any systematic organized course of auricular training.

I thank you. [Applause.]

Mr. IGNATIUS BJORLEE. I feel it would be an imposition upon your time to continue this discussion any further. I should have liked very much to continue the discussion, but instead I wish you would give me about two minutes' time to answer a question which was put to me to-day and which I think was a very fair one. It was by a young lady who was attending the convention with the hope of getting some practical suggestions which she could take with her to her home and use with a class of deaf children. Now, I doubt very much whether, from the splendid papers we have heard this evening, the average teacher who has never tried the work could bring home anything that she could make practical use of, and in just one word I would like to suggest that in a school where rythmic vocal exercises have never been tried, all that is needed is a piano, preferably a grand, a pianist, a class of deaf children, and a supply of unbounded enthusiasm on the part of the one who intends to take charge of the exercises. That is absolutely all you need to begin with. Let the pupils of the fifth, sixth, or seventh grade master some simple songs, as, for instance, Old Black Joe, America, or Come Thou Almighty King. Let them circle around the piano, put their hands on the instrument while singing, and in a month's time a teacher who has never tried the work before will be very much surprised, and everyone who has the opportunity of seeing the work will be equally surprised and highly pleased. I would in no way belittle the technical work which we have seen demonstrated in the various rooms or the papers we have heard this evening. My suggestion is simply a laboratory method of preparing the teachers who are interested and should enable them to go ahead and do some work until those who are solving the technical parts can formulate something that will be of practical benefit to the teacher in the classroom.

I thank you. [Applause.]

Dr. CROUTER. I would like to ask Dr. Yale to give us the substance of the results of this auricular training in the Clarke School.

Dr. YALE. We have done something for some time; we have done something for a long time. We don't know much about it; we wish we knew more. I am certain that many of the children whom we have to-day have made an appreciable gain in hearing within the last two or three years. There has never been a time when we have not tried to work on any child who had any remnant of hearing. The work has been at times more and other times less; crowded out by what perhaps may have been less important.

We use all the instruments and appliances that we can find. We may not do it in a very scientific way, and I am personally most grateful for this evening's presentation of the subject. I shall be wiser a year from now, and I am sure the teachers of our school will be.

I want to thank Dr. Goldstein again for his presentation of the whole subject. [Applause.]

Is there anything further this evening?

If there is nothing further to be said, the meeting will stand adjourned.

(Whereupon, at 10.20 o'clock p. m., the meeting adjourned.)

THIRD DAY, WEDNESDAY, JUNE 30, 1920.

PROGRAM.

8.45 to 11.15 a. m.:
Demonstrations and discussions, as on Tuesday.
11.20 a. m. to 12.20 p. m.:
Business meeting, convention of American Instructors of the Deaf.
2 to 4.30 p. m.:
Supt. J. W. Jones presiding.
1. Paper on the "Rochester method" by Supt. T. C. Forrester. Discussion by Mr. C. L. McLaughlin, of the Rochester School; Dr. A. H. Walker, president of the Florida School; and Supt. F. W. Booth, of the Nebraska School.
2. Paper on "Number work" by Mr. Barton Sensenig, of the Mount Airy School. Discussion by Mr. George B. Lloyd, of the New Jersey School, and Mrs. T. F. Driscoll, of the Lexington Avenue School.

4.30 to 6.30 p. m.:
Excursions.
8 to 9.30 p. m.:
Principal James C. Harris presiding.
1. Address by Hon. A. G. Cattell on "Philadelphia: Her Importance and Growth."
2. Address on "Growth of American Schools for the Deaf" by Mr. Frank R. Wheeler, principal of the American School, Hartford.

9.45 to 12 p. m.:
Musical entertainment under direction of Mr. Lyman Steed.

MORNING SESSION.

The business meeting of the Convention of American Instructors of the Deaf was held in the auditorium of Wissinoming Hall, Pennsylvania Institution for the Deaf and Dumb, Mount Airy, Philadelphia, Pa., on Wednesday, June 30, 1920, at 10.20 a. m.

The meeting was called to order by the president, Dr. Percival Hall. In an informal report President Hall urged a larger membership for the convention, reported that schools for the deaf are being more and more recognized as educational institutions, and emphasized the fact that one of the most important questions the profession

has to solve is the filling of training classes to provide more trained teachers for schools for the deaf.

The secretary, Mr. Frank M. Driggs, read the report of the treasurer, Dr. J. Schuyler Long:

Treasurer's report, July, 1917, to July, 1920.

RECEIPTS.

June 25, 1917, balance from last account	$264.88	
June 25, 1917, to Jan. 1, 1918, dues, fees, etc	263.00	
Jan. 1, 1918, to Jan. 1, 1919, dues, etc	82.00	
Jan. 1 1919, to Jan. 1, 1920, dues, etc	64.00	
Jan. 1, 1920, to June 10, 1920, dues, etc	54.00	
		$727.88

EXPENSES.

June 26, 1917, J. L. Smith, postage (91)	.84	
June 30, 1917, refund to Dr. Robert Hill, overpayment	1.00	
July 14, 1917, Miss Anna Moore, lecture (93)	25.00	
July 7, 1917, Warren Robinson, industrial bureau (92)	24.25	
July 14, 1917, Miss Helen Cleavs, lecture (94)	25.00	
Aug. 3, 1917, John Dewey, traveling expenses (95)	8.00	
Aug. 4, 1917, Howard B. Smith, reporting (96)	125.00	
Aug. 18, 1917, F. M. Driggs, telegrams, etc. (97)	7.30	
Aug. 18. 1917, A. J. Winne, expenses, lecture (98)	85.00	
Sept. 25, 1917, treasurer's bond (99)	5.00	
		306.39
January–March, 1918, book of receipt cards (100)	9.50	
Jan. 28, 1918, A. L. Pach, photograph (101)	2.00	
July 1, 1918, treasurer's salary (102)	25.00	
Aug. 27, 1918, H. E. Day, expenses (103)	52.92	
Nov. 1, 1918, treasurer's bond (104)	5.00	
		94.42
July 1, 1919, treasurer's salary (105)	25.00	
Aug. 10, 1919, premium on bond (106)	5.00	
		30.00
Jan. 1, 1920, sending notices—58 at 2 cents	1.16	
May, 1920, 51 post-card receipts, at 1 cent	.51	
June 10, 1920, treasurer's salary (107)	25.00	
June 10, 1920, treasurer's account (108)	13.32	
		39.99
Balance cash on hand		257.08
Total		727.88
Also, in addition, in endowment fund		249.32

Statement as given above found correct.

CHAS. R. ELY,
O. A. BETTS,
Auditing Committee.

The report of the treasurer, together with that of the auditing committee, was accepted and adopted.

The president then read the report of the executive committee.

REPORT OF EXECUTIVE COMMITTEE.

MOUNT AIRY, PHILADELPHIA, PA., *June 29, 1920.*

To the CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF:

In conformance to article 4, section 5, of the constitution of the Convention of American Instructors of the Deaf, your executive committee has the honor to present for your consideration the following report of the work of the convention since the meeting at Hartford, Conn., June 29–July 4, 1917.

As required by section 4 of the charter of the convention, a full report of the proceedings of the meeting at Hartford was presented to the Congress of the United States, and was ordered to be printed by the Senate February 5, 1918. Copies of this report were distributed to members of the convention, to libraries, colleges, and universities. A number of copies of the report still remain in the hands of the committee.

It was decided by the executive committee to accept the kind invitation of the authorities of the Pennsylvania institution to hold a joint meeting with the association and the Society of Progressive Oral Advocates at Mount Airy on the occasion of the centennial celebration of the Pennsylvania institution, June 28–July 3, 1920.

Many of the details of the meeting were settled by correspondence with Mr. Wright, Dr. Argo, Mr. Jones, and Dr. Crouter. Other arrangements were made by personal interviews at Mount Airy, at Columbus on the occasion of the meeting of the conference of superintendents and principals, and in Washington at the time of the meeting of the board of directors of the association.

The executive committee mourns the loss of one of its members, Principal L. E. Milligan, of the California school, who died this spring after a brief illness. His place has not been filled by our committee.

Supt. Jones, of the Ohio school, in accordance with the request of the committee, prepared a most thorough and interesting review of the education of the deaf during the past hundred years, including an outlook upon the present status of the deaf in America.

It is recommended by your committee that the selection of the meeting place and the arrangements for the next meeting of the convention be left to the discretion of the executive committee.

Dr. Max Goldstein, representing the Society of Progressive Oral Advocates, invited the convention to join in seeking the aid of one of our large foundations in making a survey of schools for the deaf with a view toward standardization. The president of the convention appointed the following committee: Superintendent J. W. Jones, Principal Isaac B. Gardner, Superintendent Augustus Rogers, Dr. Harris Taylor, Mr. Irving S. Fusfeld, and Superintendent Alvin E. Pope.

The executive committee appropriated $75 for editing the report of the meeting at Mount Airy.

The Secretary of the bureau of information submits the following report:

"During the past three years I have received, answered, and filed for reference to superintendents more than 400 letters of applications from persons seeking positions in schools for the deaf. Fifty or more requests for teachers, instructors, matrons, and supervisors have come from superintendents. Many of these requests have been received during the school year when there were few, if any, applicants for positions. All requests have been given careful attention in the hope that superintendents seeking teachers and teachers looking for vacancies would be mutually benefited.

"It is impossible to say how many teachers have obtained places through this correspondence for the reason that the transaction ends when the letters are answered."

Respectfully submitted.

PERCIVAL HALL.
FRANK M. DRIGGS.
W. K. ARGO.
J. SCHUYLER LONG.
J. W. JONES.
N. F. WALKER.
E. A. GRUVER.

The report of the executive committee was adopted.

The following officers were elected to serve for three years: President, Dr. Percival Hall, of the District of Columbia; vice president, Mr. E. McK. Goodwin, of Morganton, N. C.; secretary, Mr. J. Ignatius Bjorlee, of Frederick, Md.; treasurer, Dr. J. Schuyler Long, of Council Bluffs, Iowa. Members of the executive committee: Mr. Thomas C. Forrester, of Rochester, N. Y.; Mr. H. C. White, of Jacksonville, Ill.; Dr. A. H. Walker, of St. Augustine, Fla.

The nominating committee reported to the convention the names of the following to serve as chairman of the nine standing committees of the convention: Normal section, Mr. E. A. Gruver, of Iowa; oral section, Miss Enfield Joiner, of New Jersey; auricular section, Miss Grace Coleman, of the District of Columbia; art section, Mr. Lyman Steed, of Pennsylvania; kindergarten section, Miss Sarah Schofield, of New York; industrial training, Mr. John Travis, of Indiana; eastern section, Mr. Herbert E. Day, of the District of Columbia; southern section, Mr. Wirt A. Scott, of Mississippi; western section, Mr. F. H. E. O'Donnell, of California.

The report of the nominating committee was adopted.

There being no further business the convention adjourned at 12.05 p. m.

AFTERNOON SESSION.

The convention reassembled at 2 o'clock p. m., Supt. J. W. Jones presiding.

Mr. JONES. Ladies and gentlemen, Washington always allowed five minutes as a probable difference between timepieces. The time is better regulated in our day and generation than it was in the days of George Washington. We allow only two and one-half minutes; I therefore have great pleasure in presenting to you Mr. Forrester, superintendent of the Rochester School for the Deaf, who will discuss the Rochester method of teaching language.

Mr. T. C. FORRESTER. I have a number of copies here, printed copies, for those who are deaf or hard of hearing, and I shall be very glad if they will use them.

THE ROCHESTER METHOD.

By T. C. FORRESTER.

There have been many definitions of education, but we believe all educators are now practically agreed that that is the best system which produces the highest type of youth physically, mentally, and morally—the sound mind in the sound body and character back of all—the best foundation on which to raise capable, self-reliant, God-fearing men and women. If we do not produce this symmetrical, coordinated development in the average child our methods will have been found to be inefficient; for these tests should be the final standard by which all systems should be judged. It is because I believe the system which I am to present to you to-day can bring about this all-round development, that I stand here as its advocate. My presentation will be brief, and I can assure you it will have not more than the three faults that a certain minister's sermon had. An old Scotch lady returning from church one Sunday was interrogated regarding the sermon. "Weel," she said, "It was a guid sermon but for three things. First, it was read; second, it was badly read; and third, it wasna' worth readin'."

Now as some things are partly described by telling what they are not, we shall take up a negative attitude to begin with, but it will not be of the Irishman's type of reasoning. An Irishman was arrested on the charge of stealing a pig. After denying the charge in court, the judge remarked: "But we have three witnesses who saw you take it." "Your Honor," said the gentleman from the Green Isle, "I'll bring 30 who didn't see me do it."

Well, the Rochester method is not simply manual spelling, as is popularly supposed. Dr. Westervelt was one of the founders of the American Association to Promote the teaching of Speech to the Deaf. Mr. Lyon, late president of our board of directors, was also president of the speech association. I am also on the directorate of that body; and one of our teachers is the author of the book, "Stories and Rhymes in Melville Bell Symbols," so, therefore, we can

not be accused of being manualists pure and simple. Neither can we be accused of being antioral. We desire the best speech and speech reading possible combined with the highest literary ability it is in our power to develop. This is the aim of the Rochester school. Comparisons are odious, but if the school of which my friend Dr. Taylor is principal had not been given its present name, I should have been inclined to say that our school was the Western New York School for the Most Improved Instruction of the Deaf.

Second. It is not spelling at the rate of 200 words a minute; and it is not a combination of sign language, finger spelling, and speech.

Third. It is not a system dependent on speech alone. It is primarily the English language method. It is English through English, straight, direct, at the proper time and place. Speech when the pupils can get it through speech, but English in an atmosphere of English always, through speech, spelling, or writing.

What would strike the casual visitor most on first acquaintance would be the use of finger spelling outside the classrooms when the pupils are communicating one with the other. Signs are tabooed. They pride themselves on their ability to spell and use English, not stilted English, but free colloquial language as hearing people use it. This applies in the case of children of deaf parents just as much as it does in the case of children of hearing parents. To see the work of the pupils in English in the schoolroom, what would probably impress you most would be their free, natural way in expressing themselves. The beginning classes in the school are pretty much what you would find in any other school. They all get "stand," "run," "hop," "skip," "show me a man," "love me." But there is this difference—the young pupils get spelling out of school and they are not kept from acquiring language in school because they are unable to speak certain words and sentences. We expect children to get language in written or spelled form before they can speak it. The practice of keeping language from a child before he can speak it is something that should be relegated to the past. It is unscientific. It is unnatural, and in substance amounts to trying to impart knowledge to the child by keeping it from him, which is as our old friend Euclid would have observed, "Reductio ad absurdum." Let us never forget "Certain knowledge of language precedes speech or the ability to use it in its idiomatic form."

Then again auricular training is a prominent feature our work. Many years ago an elaborate use of telephones was made with those whose hearing was such as to make it practicable. To-day we have a very complete acousticon outfit by which we have been able to accomplish good results, and carefully kept records for several years past show improved hearing, greater discrimination of sounds, and greater development in natural tone and pitch. I should refer you to an article in the Volta Review of February, 1920, for some of these tabulated results.

It has been argued that speech should be used in order to develop the speech centers in the brain. Our pupils think in speech. Upon investigation I find that some are quite conscious of muscular movements in the throat.

Have you ever thought of the splendid mental training which is afforded by carrying on an extended conversation by finger spelling? Finger spelling has also another added advantage, a psychological one—it forms a thread of association and thus an additional aid to the memory. As a leading psychologist remarks: "The threads of association are not distinct and parallel, like the strings of a harp, but intersect one another, forming an intricate network. One result of this complexity is that different threads of association converge in the same point; so that the recalling of a fact may take place by the cooperation of a number of suggesting forces. The general effect of such cooperation may be stated in the principle that the more numerous the associations between a particular impression and other mental elements, and the more firmly it is associated with each, the more likely is it to be recalled.

In recalling a series of words, for example, as those of a poem, the child's mind may travel along any one of a number of parallel paths. Thus it may move now along that of the sounds, now along that of the visual signs, and now along the series of images or ideas corresponding to the objects described and events narrated. And thus, if the members of one series are not firmly knit together his mind can make use of the other series. Thus, in forgetting how the sounds follow one another, it may take advantage of the visual series, the image of the printed words." And we might add—printed words in the air.

Finger spelling is exact, clear, and definite, and in these respects is superior to speech alone for the deaf, speech which at the best is imperfect. When we

have this combination of speech and finger spelling, the one supplementing the other, we have the perfect method. We have been asked why we did not have more speech reading in the senior classes: We devote one hour a day to speech and speech reading with these. Well, it is for the simple reason that we believe it would be putting the cart before the horse. Good intelligent speech reading depends on good intelligent knowledge of language, a very liberal vocabulary, and a good command of idiomatic English. These we try to give our pupils, and we find that our old pupils after graduation and with experience in the larger life of the world, read the lips remarkably well, due to their superior command of the English language. For the same reason our returned deaf soldiers readily learned speech reading; and how proficient in the art do we find those pupils who had a good command of language before their hearing was lost.

Listen to Dr. Bell: "We usually postpone the presentation of reading matter in the form of books, and so forth, until after the child has acquired the English language, thus making reading an end rather than a means. Instead of having him learn the language in order to read books, I would have him read books in order to learn the language.

"In order to be sure that young children who know little of the English language are absorbing the words—whether they understand them or not is another matter—it might be well to have them repeat the words to themselves.

"Where manual methods are employed, there is no difficulty in doing this; all we would have to see is that as the pupil reads his book to himself he spells the words upon his fingers.

"With orally taught pupils, however, we can not be so sure that all the words are making their due impression upon this mind; because our written language is so unphonetical that he would not know how to pronounce them.

"The manually taught child can spell them on his fingers, but the orally taught child can not spell them with his mouth. In his case the only way in which we can be sure that the written words are making their impression is to have him copy what he is reading. This would be a very slow and laborious process compared to spelling on the fingers, and I must say that I think oral teachers are unnecessarily afraid of the manual alphabet. So far as I am concerned, I see no objection to any child, deaf or hearing, spelling English words upon his fingers."

Most of our teachers speak when they spell, and many of our pupils do the same thing. But if we dropped finger spelling we should to a great extent have signs taking its place outside the classroom, and the English atmosphere of the school would be destroyed—and that atmosphere we consider our greatest asset. For as soon as two deaf pupils get together and cease to be in the presence of, or in communication with, the hearing, they as a rule will choose their own way of communicating with each other; and that way will follow the line of least resistance, if they are at liberty to decide for themselves. Don't be afraid of finger spelling. You know what Helen Keller has accomplished chiefly by this medium. It has not hindered her acquisition of speech; but, I venture to say, helped it materially.

We literally surround our pupils with English. They absorb it, digest it, assimilate it, and it becomes part of their being. English given as we give it is more palatable, more easily assimilated, and therefore more strength giving. No repetitions are necessary, as in speech alone; and no change in form is necessary, as is frequently the case where speech alone prevails. There is no better introduction to reading than through our system; and our children early acquire a love for books. We find, for instance, some who are not even in the high-school department reading continued stories in the Saturday Evening Post. Our pupils are regular patrons of the city library, and we have a splendid library of our own, of which they make good use. To achieve the highest results in the education of the deaf, the ability to read and understand English is the greatest factor, and we believe that our way leads more easily and naturally toward that goal than any other.

But no system is in itself sufficient if it has not behind it the energy and devotion of faithful, loyal teachers, who are the soul of all education. Dr. Westervelt, my distinguished predecessor, gathered around him men and women who had that loyal devotion to duty—men and women who have made the well-being of the deaf the first consideration, and who by their character and work have left a deep mark on the Rochester school.

Mr. JONES. The discussion of this paper will be opened by Mr. C. L. McLaughlin, of the Rochester school.

I understand there is a demonstration to go with Mr. Forrester's address before we pass to the discussion.

Mr. FORRESTER. I spoke to Dr. Hall about the demonstration some time ago. Dr. Hall is responsible for my being on the program, so get after Dr. Hall if you are not satisfied with it. I will say Dr. Hall thought a demonstration was worth half a dozen papers. I think so, too, so I am going to ask Miss Smith, who has charge of the class in Latin, to give a little demonstration, a Latin exercise, and Miss Westfall who has charge of the French class, to give a little demonstration in French, and we have a boy here who will work a problem, possibly, in the binomial theorem. The teacher will select something from those textbooks and exercises, and they will have the work done here.

We have brought three graduates with us; we might have brought a fourth, but the fourth was a hard-of-hearing boy, and it would not have been fair to bring him here. He is going to Cornell University in the fall. He has passed all the requirements for entrance. Two of the young ladies here will go to the University of Rochester in the fall. They have the necessary counts for entrance. The young man will go to the Mechanics Institute. He had originally planned to take a university course, also, but he thought perhaps he had better follow a mechanical career.

Miss SMITH. We have been translating Virgil, the Æneid of Virgil, the course outlined by the State Board of Regents for the fourth year of high-school work. We have chosen a part in book six, the descent of Virgil to the lower world. The girls will translate a few lines for you,

(The demonstration proceeded.)

Mr. FORRESTER. Now, if you would like to test those children outside you are at perfect liberty to do so. This is no set exercise we are giving here; if they can't stand your questions outside they don't stand the test at all.

This boy [indicating] was born deaf. There are three brothers in the family—three deaf brothers. This young woman lost her hearing when she was a year and some months old; the other young woman was four years and a few months old when she lost her hearing. When she came to us she had no written language; she had a little baby talk.

Miss YALE. How long have they been under instruction?

Mr. FORRESTER. I will find out for you, Miss Yale. I have it here. Doris has been 14 years, the bigger girl of the two, the one who lost her hearing when she was a year and a few months old; the other the same time.

Miss YALE. And the boy?

Mr. FORRESTER. Fifteen years.

Miss YALE. Fourteen and fifteen years, then?

Mr. FORRESTER. Fourteen or fifteen years. Of course, he has taken the high-school course, too, in Latin and French and mathematics and other subjects necessary, but when he found he would not go to the university but would take a mechanical course instead he dropped the French at Christmas time.

Now, we will have just a few minutes of French.

(The demonstration proceeded.)

Miss WESTFALL. These two girls have had two years in French. They have passed their Regents' examination, their second-year Regents' examination, and are ready for college French.

This exercise differs from classroom exercise in that the questions to be answered in French in the class are asked in French. I thought it would be rather wise to ask them in English, as you might understand my English better than my French.

Mr. JONES. It will be necessary to change the program a little. Dr. Walker will have to leave, and after the discussions on this paper we have some miscellaneous business to take up before we pass to the next paper, I hope no one will leave. They will be short.

We will now hear Dr. Walker's discussion of Mr. Forrester's paper.

Dr. A. H. WALKER. Mr. Chairman, ladies, and gentlemen, I am sure that you have enjoyed the paper and the living exhibits as presented to you by Supt. Forrester, giving you some idea of the Rochester method.

When I was informed that I was to discuss this question I hailed it with gladness. I felt that my hour had come. If there is anything that I do like to discuss it is the question of methods; therefore, as Tennyson says, I grated and filed my thoughts until they impinged very strongly upon this great question of the Rochester method. I therefore prepared a discussion that would take up probably one hour or one hour and a half of your time. I am now informed that I have only three minutes; therefore, all the thought that I put upon this subject will come to naught and I will have to discuss it from a three-minute angle.

Some one has said, "Sing me the songs of a nation and I will write you its history." Paraphrasing that, let me say: "Give me the history and the personality of the man at the head of a school and I will write you the history of that school." Knowing the founder and sponsor of the Rochester method, it could be nothing but a success. It was my privilege and my pleasure to know Dr. Westervelt, a man of decided opinion, aggressive, strong in mentality, and full of this method, and whatever has developed from the Rochester method is through the personality of this great man who has recently left us.

I thank you. [Applause.]

Mr. JONES. Mr. C. L. McLaughlin, of the Rochester School, will now further discuss the paper, and the interpreter will be Mr. Forrester himself.

Mr. FORRESTER. I may say in introducing Mr. McLaughlin that he is himself a product of the Rochester method. Mr. McLaughlin lost his hearing when he was a year old, and graduated at the Rochester School and from there went to the University of Rochester and graduated with the degree of bachelor of philosophy. He is the teacher of mathematics in the advanced department and a splendid teacher he is. I never saw his superior.

Mr. DRIGGS. How many years was he in the Rochester School?

Mr. FORRESTER. Ten years. I will read Mr. McLaughlin's paper.

THE ROCHESTER METHOD.

By C. L. McLAUGHLIN.

The Rochester method is a distinct system which, by reason of its successful development from an original theory, has taken its place among the various methods of instruction in schools for the deaf. According to the popular impression, it is all finger spelling, no signs at all, and comparatively little speech. This is reflected in the technical designation, the "Manual Alphabet Method," which was recommended by the committee appointed in 1892 by the conference of principals to simplify and classify the nomenclature of methods. While it is classified correctly as to the distinctive features of our teaching, yet it is somewhat misleading in name. The term "manual-oral" should more properly indicate our true and ultimate aim which, however, finds its best expression in the title of our school periodical, Advocate of English and Speech for the Deaf.

In 1878 Dr. Westervelt, then in his second year as superintendent of the Rochester School for the Deaf, declared the theory with which his name is inseparably linked. Though a sign maker unsurpassed in skill and grace, he determined to abolish the use of signs, with their inevitable distortion of language, not only from the classroom but, for the sake of consistency, also from the whole school life of his pupils. The fact that the adult deaf in those days characteristically deteriorated mentally, lost their interest in reading, and showed a tendency toward shyness and timidity in the larger affairs of life—a fact which was painfully apparent to him in his life-long association with the deaf—convinced Dr. Westervelt that there was an inherent defect in the foundation of education as laid in the schoolroom. How to reach the minds and hearts of the mass of congenitally deaf children and closely approximate their conditions of studying and thinking to those under which normal hearing children grow became his chief concern. The psychologist in him refused to believe there was such a condition as the "deaf-mute mind," with its need of a simplified or artificial language; philosopher that he was, he insisted that the human mind, a God-given gift, functions best with the proper workings of the laws of language growth, regardless of whether a chief avenue of the mind is closed. In other words, he fully believed that the deaf child should and could be made into a reasoning being. Thus he came to the conviction that English as spoken and written should be exclusively used in the classroom, and throughout all the activities of his pupils for the ultimate result of molding their minds into the correct forms of thinking. After eight years of earnest effort, Dr. Westervelt was able to submit at the California convention, in 1886, results which demonstrated conclusively that children who are born deaf can be taught the English language without recourse to signs.

Now after 42 years of constant use the Rochester method has reached such expansion and development as has convinced us in our own minds that it is a rational, progressive method of instructing the deaf. It is analogous in its main respects to the method under which the deaf-blind are educated.

What, in essence, is the Rochester method? Let me repeat from Dr. Westervelt: "It is the principle of our method of instruction that the child has a right to receive instruction through that form of our language which he can understand most readily, with the least strain of attention and the least diversion from the thought to the organ of its expression." If you could witness the dexterity with which pupils let fingers fly, flashing thoughts in correct form from mind to mind, the readiness with which they speak and read lips, the rapidity with which they grasp the unit of thought, you would appreciate the truth of this principle.

Every word is spelled, written, or spoken. These three modes of expression are constantly as well as abundantly interchanged, with the object of generating such a driving power of repetition as will make the use of idiomatic and colloquial language a habit with pupils. Teachers and officers, who are recruited from normal schools and colleges or at large, know nothing whatever of the sign language and communicate freely with children by spelling or speech, talking to them as they would to hearing children and never for a moment hesitating as to what words to use. There is a complete absence of that embarrassment which is apt to ensue between teacher and pupil with the introduction of conventional gestures or when the words are spoken and not

understood. With teachers, officers, and pupils all spelling and speaking after these many years, there is an atmosphere about the school that is distinctly English, and which, as if by second nature, reacts on the minds of children, making them ever desirous to spell, speak, and think along the grammatical lines of thought. The desire to make signs is completely removed. In fact, precedent has become so strongly established that the sign maker, upon entering our school from another, immediately falls under its spell and feels quickened in thought as he has never been before. Surrounded by pupils and teachers spelling and speaking with easy freedom and in open confidence, he feels instinctively that sign making is entirely out of place, and after a year or so he is likely to be one of the most ardent followers of the method, for there have been opened to him such possibilities as will spur him to greater mental effort. He has learned to pull down a book unafraid, and he can sit down to write a letter that he does not need to submit for correction. For what can be more wonderful than self-confidence? And how can this asset be given to the deaf child without first causing him to feel of his own volition that the English he uses is intelligible to anybody and puts him ahead in his studying? It is a fact that sign-making pupils entering our school have, almost without exception, undergone mental changes that were truly pleasurable to them. Those children were generally of the intelligent sort. It was the birth of self-confidence, the sense of newly acquired power, the propelling force of a good command of English that reanimated them.

Upon becoming adults, they sometimes resume making signs in other communities of the deaf. This is their own affair; for it is our theory that once his mind is accustomed to correct habits of thinking in English the adult deaf person can make signs without hindrance to his own mental growth. This is well demonstrated in the case of the semideaf or semimute who has used speech and English all his life. Let the adult deaf make signs when they choose, but by all means keep the signs out of the schoolroom and even from the entire school.

Does finder spelling interfere with speech or speech reading? Thus far we have reason to bel'eve that if the question is to be determined largely by the aptitude of the pupil for speech and lip reading, the Rochester method is peculiarly fitted as a means to that end. Ours is virtually an oral method using the manual alphabet as a strong prop. Teachers and officers invar'ably speak and spell at the same time, leaving it to the pupils to read the hand or the l'ps alternately, separately, or simultaneously. This practice is carried on not only in the classroom but wherever teacher and pupil meet, thus affording abundant practice in lip reading under changing circumstances. Again, it is not unusual for most of the advanced pupils to speak and spell, either at recitation or in open assembly. It is not so much the practice in art'culation as the careful weighing of words for their sequence that prompts this common practice among the upper classes. Many pupils testify to the fact that as they read or talk on the fingers they are conscious of an involuntary movement of the throat muscles. They attribute it to an impulse that would fairly burst into song, and declare that they find it a genuine aid to the tuning of emotions in the course of reading. During the past year I noticed that four congenitally deaf children in the fifth grade were committing to memory chiefly through inaudible speech, and learned from them that they thought in finger spelling for construction thinking, and thought in speech for the sense of smoothness. Speech and lip reading are kept up to a surprising extent among the graduates and former pupils of our school, who testify that as long as they use good English and keep well informed, they do not hesitate about mingling with their hearing associates, and communicate by speech, spelling, or writing, according as the occasion requires. On the whole, there is a wealth of testimony to show that finger spelling is an aid rather than a hindrance to speech and lip reading.

In addition to the main advantage of rendering a visible language, the use of manual spelling is helpful in other ways which blend into the important factor of discipline. Constant practice in finger spelling disciplines the eye, concentrates the attention, sharpens the perceptions. And what we value as indispensable for moral train'ng, it is an actual restraint upon temper as well as a developer of personal dignity, which is due in part to the measured utterance which dactylology necessitates.

At our school all communication among the pupils is through visible English words—"Constantly using and seeing language in the schoolroom, language at

play, language at work, language at the table." This abundant use of colloquial language brings out the practice of using the right word at the right time. Synonyms, antonyms, and the various meanings of words as well as sentence forms, become fixed in the pupil's thoughts through the aptness of the occasion and the force of constant repetition. "What do you call this?" "What does this word mean?" "Is this correct English to say?"—these and kindred questions are asked almost daily. We encourage this spirit of helpfulness among pupils, as it neutralizes to some extent the tendency to make and assimilate mistakes of grammar. Pupils read the face together with the hand, not so much for the words themselves as for the spirit of the sentence and the unit of thought. Swift of eye and alert of mind, they will have more respect for you if you will address them in a high order of English and with no hesitation regarding their capacity to understand. This is a strong characteristic of our school, showing that finger spelling is as happy a means of communication as can be desired for the lasting benefit and profit of the deaf. It transcends pure oralism in range of thought and sign making in excellence of language.

The mind of our pupil is thus saturated with English and primed for better English. Does it not follow that our graded work is greatly facilitated? In this very respect the Rochester method has its worth well proved. The language ability of the average pupil, which is developed with more or less regularity from grade to grade, has long since made it possible for our school work to be standardized with the courses of study that are prescribed by the New York State Department of Education for all the public and high schools in the State. To be sure, our children are older than the hearing at the successive stages of their progress. But to have them know that they are studying the same subjects, using about the same texts, and taking the same examinations as the hearing, and that they can make almost the same rate of progress, gives them worlds of confidence, reenforcing their growing conviction that with an adequate command of English they can eventually say "sesame" to the doors opening into the treasures of reading and studying. As for the backward pupils, they are detached from the graded course of progress and given a special course of instruction through the same methods of teaching. Classes meet different teachers for different subjects on the plan of rotation during the day, and have an hour devoted to speech work and lip reading in addition to the practice that they obtain in the other classrooms. Small classes are the rule in our school, so that the teacher is in complete mental communion with the class, and thus follows their progress in English work.

The Rochester method lends itself admirably to the requirements of high-school studies for the simple reason that good English work is the basis of progress. For 40 years the high-school department has been the object of attainment among our pupils, who regard their graded work more or less as a stepping-stone and, ever mindful of finger spelling as a valuable aid in the acquisition of good English, look ahead with a hopefulness that has become traditional with our school. This craving for higher learning had created a demand of such long standing as to make it expedient for our high-school work to be reorganized and identified with the regents board of the University of the State of New York. That was about 1906. Not that every pupil is expected to make the high-school course, much less the full academic course of four years; but our experience has shown the wisdom of giving every possible encouragement to the large number of our pupils who are carried along by the momentum of their own progress through the prescribed course of studies. Let the fact sink deep into the pupil's consciousness that the better English he uses the better thinker he will become; and to substantiate our confidence in his ability for thinking we would throw wide open that course of study which is pursued by hearing students, and afford him healthy conditions of progress under which he may stretch himself out to the fullest. Give the deaf child English in direct form, and he will desire more of it. Give him English and plenty of English, and he will be rounding out mentally possibly beyond his own anticipations. The deaf child who is sensitive by nature is "what he thinks he knows what you know he is." The teacher's general attitude is an important factor in giving a trend to his young mind in its formulative stage. Encourage him into the belief that he is capable of more and still more learning, show him the way to the realization of his awakened ambitions, and because confidence begets confidence he will respond in kind, particularly when, as in our own case, he has discovered for himself that finger spelling is the surest basis of mental development.

Children who are hard or failing of hearing find it possible to enter our school and slip into the same grades from which they leave the public schools and carry on the same work advantageously. Teachers can also switch from hearing schools into our school and back without serious interruption to the workings of our method. That it can thus have a point of contact with hearing schools gives an added advantage to the Rochester method, which proves that finger spelling supplemented by speech and writing is a ready and satisfactory mode of communication.

I have discussed the Rochester method as regards its theory and practice, indicating briefly how its positive spirit of confidence permeates the system that is pointed toward a quick mastery of verbal language among the deaf. I have touched upon its general merits, rather than its defects and imperfections, for the reason that as a method it contains elements of permanence that have withstood crucial tests of experimental use and, in their last analysis, will tend toward improvement in the course of time and experience. The Rochester trained deaf unhesitatingly indorse the principles for which our school has long stood, and unite in acknowledging that the manual alphabet has been a potent influence throughout their lives, lifting them upon a plane where they can think, act, and plan for themselves with some assurance at least. Inasmuch as they have freely discussed the ultimate results of their school training, I will, in conclusion, take their point of view that is clearly defined, and submit the following deductions based upon their testimony respecting the value of the Rochester method.

The conventional sign language is not a vital necessity in the schoolroom. Being a form of general convenience, it has its place only among the adult deaf.

Speech, finger spelling, and writing are for the deaf interchangeable forms of verbal language that can be kept in progression with the principles of grammar and rhetoric.

A command of English is a force that can be raised to the nth power for the deaf, through finger spelling as a productive factor.

"Speech is instinctive with the full mind." When the pupil has acquired a wealth of mental resources through finger spelling, his soul will find utterance in the cry, "Open Thou my lips and I will shew forth Thy praise." Speech is by all means desirable as an end. It should be encouraged in every way, provided that manual spelling is used as a developer of language.

The Rochester method reduces to a reasonable minimum the monotony of drill work and makes for instruction and progress.

Under the Rochester method the congenitally deaf can fairly compete with the semi-mute and hard of hearing. Virtually every child is thus reached and vitalized.

The Rochester method can be extended into the homes of deaf children who must continue to speak, spell, and write.

The Rochester method exercises a lasting influence upon the love of reading, which is one of the great blessings for the deaf.

The Rochester method brings out the individuality of the child to a marked degree and develops a high moral type of pupil.

Speaking of the several methods of instruction, some would fit the child to the method, others would adapt the method to the child. For our part we would at once set before the child a high standard in the acquisition of good English and build about him an environment that will endow him with a true sense of proportion, and give him a correct prospective into relations with the hearing and the outer world.

Mr. JONES. That was a wonderful exhibition of finger spelling. Proud may any school be of a champion like that, especially when the champion is a product of the school and the method. We could not help but be reminded of Pope's little couplet:

> For forms of government let fools contest,
> That which is best administered is best.

Dr. Westervelt gave his life to this system; he believed in it; he succeeded with it; had he believed nothing definitely and certainly he might have had no representative here to-day. It is the man who believes what he believes, knows he believes it, and persistently pursues it, that succeeds with it.

Mr. W. F. Booth, of the Nebraska school, will continue the discussion.

THE ROCHESTER METHOD.

By F. W. Booth.

We are indebted to the writer of the paper for his clear definition of the Rochester method as "primarily the English language method. English through English. Speech when the pupils can get it through speech; but English always, through speech, spelling, or writing." It thus employs every form for symbolizing language that exists, including manual spelling which, being an important, if not, indeed, the chief form of expression used, gives the method its distinctive character, differentiating it particularly from the oral method, which it otherwise resembles in its essential features.

It will not be my province here to-day to raise the question as to whether or no the employment of the manual alphabet as an adjunct of the oral method in a school or a class is a help or a hindrance, as to whether it is a plus or a minus factor in the various educational equations. That remains as yet to be proven by further and more exhaustive trial with careful comparison and study or results obtained in the best schools employing the methods.

But whether the outcome of this further trial shall give us proof that the manual alphabet is in fact a plus or a minus factor, I feel confident that it will be shown to be but a small factor in any event. My own conviction is that in their body the two methods, the oral and the oral-manual, are practically identical, both being exclusively English, therefore possessing in common the one element making possible superior educational attainment. In other words, with the great major factor the same, and differing in but a minor particular as between an exclusive dependence upon lip reading on the one hand or a combined dependence upon lip reading and manual spelling on the other, we may not expect more than minor, therefore small, difference in the educational results secured.

However, it may be well to consider the plus and minus factors, even in their small measures. What are the plus and minus factors in the lip-reading or oral methods? It will be accepted that the principle of complete dependence upon lip reading makes for larger skill in and a more nearly complete mastery of the art. Complementary to this plus is another, the creation of a mind habit of attention and of intensive study, with its resulting cultural benefits. For effort educates and nothing but effort educates.

The minus in the exclusively oral equation may be conceived of as residing in the fact that the mediums of thought transmission, the speech of the deaf child or the lip movements of the teacher may, and do at times, fail to transmit clearly or fully the thought. But resort to writing cancels out this minus quite as effectively if not so conveniently as does resort to manual spelling in a similar emergency.

But what of the plus in the oral-manual method? It lies in the fact of the great convenience of the manual alphabet as a recourse where lip reading is clouded or speech is indistinct. It furnishes in effect a medium instantly available and one perfectly transparent of the thought to be conveyed. It is, in brief, English at its easiest, and its use makes for language fluency and the covering of a large area of language forms with classes or pupils of all grades of advancement, including dull or backward pupils, in whose instruction methods in the nature of things are put to the severest strain. Yet this very plus of convenience and ease paradoxically resolves itself into a minus, and a serious one, in the case of the pupil, or the class, where lip reading and speech prevail as the chief medium of communication, with the end in view the giving of these accomplishments to the full of possibility. The great, and really only, objection to the manual alphabet in a speech class or school is, it is too convenient, too easy as a resort, and the ease-loving pupil will passively wait for it, knowing it will come if he but waits, and the ease-loving teacher, possibly a faith-lacking teacher, will hurriedly resort to it that some particular lesson ground may be quickly and easily covered. Distrust of lip reading and of speech, however shown to the pupil or to the class, must have effect to discourage the effort where effort—the habit of effort—is the essential to success and the vitally important thing to secure and conserve. Effort educates, I have said; hence the superiority of lip reading, requiring the supremest effort of which perhaps the studying mind is capable, over hand-alphabet reading, which,

because of its ease and plainness, requires and so induces little, almost no, effort for its interpretation. In a word, lip reading makes for more strenuous effort, with a resulting increase in educational values secured, than does lip reading with the manual alphabet as its handmaid and helper, ever waiting to be used when needed.

Lip reading and hand reading have certain values in common, among them one that should be emphasized. They alike contribute to make of our pupils print readers, giving them an easy ability to read books with the natural attending enjoyment. As the more difficult includes the easier, lip reading especially, because of its very difficulties, makes, in its mastery, for the easier mastery of print reading. It should be said, and I believe it should be emphasized, that the mind attitude and the mind action involved in lip reading, and likewise hand reading, are identical in all essentials with the mind attitude and action as involved in reading the printed page. Thus we may be said to have secured the solution of the reading problem as a by-product in the practice of our exclusively English language methods, and that in itself, it may be observed in passing, is an accomplishment quite worth while.

But all comparisons aside and all other values in their various measures conceded, the Rochester method must have ever a high place in history for what it has during the past 40 years contributed as a progressive force to the best advancement of our work. And this can be said of it, even if the time should come when it will be modified in ways and to a degree so that it may no longer exist or be practiced in its present distinctive form. It has done a work that needed doing and that possibly could never have been accomplished by other means or agency. I undertake to say the method has been a great educative force, educating the great body of the profession, at one time profoundly ignorant and in the extreme skeptical, up to the level of appreciation and acceptance of English methods as adequate and superior, measured in terms of actual values secured in the various phases and branches of our work. I personally confess to have been at one time possessed of the profound ignorance and extreme skepticism of which I speak. I was in the dark, and I could see nothing of good in the oral method particularly, the then only exclusively English language method practiced. I reasoned that the impossible was impossible, and that was all there was to it. I had to be shown, and many others with me in a like state of unbelief and prejudice had to be shown and convinced.

The Rochester method came along, and by its easy and familiar method of applying the pure English principle we were lulled into an attitude of tentative acceptance of that principle and experimental application of it in spots in our own teaching. The Rochester School at that time functioned virtually as a research laboratory in which the acid test was given under the most favorable conditions in the application and use of purely English methods, demonstrating their adequacy and superiority.

I might sum up my thought of the great service performed for us by the Rochester method by comparing it in its uses to a bridge. As we hark back to conditions of a quarter of a century and longer ago we remember that a great gulf lay between the two methods of educating the deaf then practiced, the manual or sign-language method and the oral method, a gulf impossible to cross except by long detour, following uncharted paths. The Rochester method in effect gave us the easy, convenient passageway across the gulf, and upon its high level of English requirement and attainment we, or many of us at any rate, found ourselves almost before we realized it at the end of the bridge with our feet solidly upon oral ground and accepting conditions there found almost as though to the manner born.

All honor, then, and all credit to the Rochester method and to Zenas F. Westervelt, who devised it and established it and in its earlier days so valiantly battled for it. They surely will live, both method and man, in the permanent annals of our craft.

Mr. JONES. This ends the discussion.

A telegram has been received by Dr. Crouter from Dr. Dobyns, superintendent of the Arkansas school, and you will be interested in it. [Reading:]

Please ask Supt. Jones, presiding, to say to the teachers I am for the Rochester method as one of the planks of our platform.

There is just one other thing. You know there has been a committee for four years working on efficiency. The report of that com-

mittee is in book form. The book is sponsored by Mr. Johnson, the chairman of the committee. The superintendents of all the schools for the deaf in the United States and Canada have been called upon to subscribe for copies of the book to defray the expenses of publication. Four hundred and forty copies have been taken, leaving 60 on the hands of the executive committee. A few schools have not yet subscribed. The executive committee would be delighted if these delinquent schools could see their way clear to help share this little burden, which belongs to the profession in general. The book is highly worthy of a place in the literature of our profession. Nothing like it has appeared in any profession. It is new in a great many respects, and it covers a wide field in education. Mr. Johnson has given the very best that is in him to that work. He should be supported by the profession. He has some extra copies also that will be sold later to individuals who may wish to purchase. Mr. Johnson will be given three minutes to tell what his plan is. [After a pause.] I am sorry he is out. We shall hear him at a later time.

Now, take five minutes to rest and change your position. Then the program will be resumed. We shall have 65 minutes left for the next paper and the discussions thereon.

(The convention took a recess for five minutes.)

Mr. JONES. We are under promise to close this meeting, according to program, at 4.30. The discussion will be opened by Mr. Barton Sensenig, of the Mount Airy School, to be interpreted by Miss Herdman.

TRAINING FOR NUMBER WORK.

By BARTON SENSENIG.

In preparing to teach arithmetic one must acquire the art of thinking accurately and rapidly. Much time is wasted by teachers of arithmetic who can not see errors almost at a glance. A teacher should know immediately whether or not an answer is out of proportion to what the result should be. On an average there are only about 45 minutes per day at a teacher's disposal, and every minute counts; so time is a very essential consideration. Pupils also have great respect for a teacher who can do work quickly and accurately, and they unconsciously imitate their master.

In order to be well prepared one should have the training involved in a grade school, a high school, and a normal school. The grade school and the high school will give him a knowledge of the subject matter and the normal-school training will give him a wider outlook on the subject and will teach him the best methods of presenting it.

NORMAL TRAINING.

The ability to impart in the simplest terms what one knows is high art. High art in teaching is always corelated with great simplicity, and as the chief business of a teacher of the deaf is to simplify the simple, he above all others should be quite an artist. He should be a master of the subject and a master of the pedagogy pertaining to it. It is, therefore, of great advantage to a teacher of the deaf to have had normal-school training. We do not allude to the year's special training to teach the deaf. That should follow the general normal-school course, which covers about two years. The order of preparation should be a high-school course, a normal-school course, and then the special training to teach the deaf. A teacher so prepared could of right demand more money than is paid to public-school teachers. Such preparation to teach the deaf would also be setting up a standard which all would be bound to respect. It does not sound well to have it said that a certain high-school girl who failed to graduate is now teaching the deaf. The enlarged standard of preparation, however, will never be realized until the average salary of teachers of the deaf is very much increased.

PEDAGOGIES OF ARITHMETIC.

In this article on "Training for number work" we shall emphasize the pedagogical phase of training. A normal-school course has to do with knowledge of a subject, the history of it, psychology as related to it, pedagogy of the past and present pertaining to it, and the present tendency of thought with reference to it.

In preparing to teach children arithmetic one must know something about psychology, but even more should he know pedagogy. Our knowledge of psychology as applied to the teaching of a subject is generally expressed in its pedagogical principles. One should be cognizant of the viewpoint of those who instructed children long ago. One should be familiar with present-day pedagogy, and one should have sufficient common sense not to be led astray by every radical pedagogical wind that blows. Methods that have stood the test of time probably have much good in them, and should not be discarded in entirety. The classroom experience of a thinking teacher, combined with a knowledge of past and present methods pursued by others, will enable him to judge wisely with reference to adopting new methods.

In order to throw into perspective efforts of educators in the past as related to modern methods we shall first dwell briefly on the historical aspect of arithmetical effort.

HISTORICAL ASPECT.

Many attempts have been made during the centuries to simplify mathematical processes and to present the facts of arithmetic in the best form. No one mind has contributed a lion's share of the progress that has been made. Arithmetic is a growth of centuries of thought. The Romans, a practical people, contributed practically nothing. The Greek philosophers emphasized the reasoning side, but contributed little of practical value.

The Arabic and Hindoo numerals were a big contribution. Up to the time of their introduction in Europe in the sixteenth century instruction in arithmetic was based on object teaching—a slow and cumbersome method. After their use reckoning was done more easily, and the work became largely mechanical. Rules were laid down for doing work, and these were often not well understood.

Von Busse (1786) was among the first to break away from the rule method by employing pictures to illustrate. He associated number ideas with figures. Thus with a picture of three dots he would associate the word three and the figure 3.

Pestalozzi introduced objects in primary teaching, and this method is still in use.

Tillich, one of Pestalozzi's pupils, made a large contribution, in that he showed that a number of two figures may be looked upon as a number of units and a number of tens. A step further and a number of three digits would be a number of 10 tens, or hundreds, tens, and units; from this grew up the decimal system.

Frederick Kranckes (1819), like Von Busse, used number pictures to illustrate, but he followed the plan of developing rules and principles through intellectual instruction. This was a great improvement upon the method of using rules, the reasonableness of which had not been shown. He also advocated teaching arithmetic by the concentric-circle plan. For example, the first circle would embrace the number relations from 1 to 10, the second from 1 to 100, and so on.

Grube (1810–1884) enlarged upon Kranckes's concentric-circle plan. He taught all the fundamental processes from 1 to 10 as a year's work for beginners. This method does not fit in with the pedagogical maxim, "Proceed from the simple to the complex." Division is much harder than addition and subtraction. Then, again, children like to count, and find it a pleasure to step beyond the 10 mark.

Grube and others who have followed him have simply wasted valuable time in making a too-liberal use of objects, which comes as a result of working with numbers within a narrow limit. One need not forever dwell upon the number concept. Four pictures, four rabbits, four trees, all involve the same number concept, and there is no use in multiplying names. The children readily see that 5 is more than 4 and 10 is more than 8. Any number over 5 is grasped by combinations or by counting. You may look upon 10 cows in a field, but you do you know there are 10 until you count or combine groups.

The Speer method of teaching number ideas by measures and pictures has been carried out in some city systems, and upon examination it has been found that pupils so taught have lost about a year by the time they reach the sixth grade in the public schools. After the number idea has been gained it is not necessary to dwell upon its continually. The presence of the object hinders the freedom of thought. If I buy 6¾ pounds of meat at 40 cents a pound, the question is how much is 6¾ times 40, and while I am making the calculation the meat fades into the background. The only other question is whether or not I have money enough to pay the bill.

MODERN TEST METHODS.

In these times teachers are not willing to accept the opinions of others unless these opinions have been subjected to test and have been found of value. These tests are generally applied to very large groups of pupils, covering many districts, and in the main are scientific. No one name stands out preeminently in this investigation work. Some of the conclusions arrived at may be stated briefly.

Experiments conducted by J. M. Rice (1902) led him to make the following statements in effect:

1. Achievement in arithmetic is not commensurate with the amount of time put on the subject. Of two schools devoting the same amount of time to the subject, the average for one was 80 and for the other 25.
2. The greatest amount of home work was required in the city where results were poorest.
3. Superiority, mediocrity, or inferiority in any grade in a given city means the same state of affairs in all the grades.
4. Schools in slum districts do as well as those in aristocratic sections.
5. The time of day in which the tests were given made no difference.

In all the schools, numbering about 6,000 pupils, from the fourth to the eighth grade, thoroughly modern methods were in use. Mr. Rice came to the conclusion that the best results were achieved in schools where the supervisors set a high standard and set examinations to test the teachers' progress.

Dr. C. W. Stone made a study of arithmetical abilities and some of the factors determining them. He collected his data from 26 representative districts. He attempted to find out the nature of the product of the first six years' work in arithmetic. Dr. Stone found that one step in a problem in fundamentals is about equal to another, whether the step be long or short. In an addition problem with columns of six figures each, 96 per cent of the children did the first column of six figures correctly and an equal per cent did a correspondingly difficult problem of eight figures correctly. In like manner, about as many failed in short-column addition, in multiplication problems, as in longer columns. These data were gathered from upper sixth-grade children.

Dr. Stone found no evidence to show that girls are either more or less stupid than boys. He also discovered that there is no such thing as general arithmetical ability. There are many arithmetical abilities. This last statement has tremendous significance, not only along arithmetical lines, but along all other educational lines.

Dr. Stone found that a certain city "stood lowest in addition, next to lowest in subtraction, third from lowest in multiplication, and fourth from lowest in division." He states that "if the net results of arithmetic were a product, each system would have the same relative position in each phase of the subject." We are to conclude that ability along certain lines is not distributable along other lines which are not analogous. "Our mental life consists in abilities and not of faculties, and these abilities become specialized." This is the teaching of modern psychology. I was taught that the mind consists of faculties, and that if these were trained through the study of certain subjects this training was available along other lines. We studied subjects for the sake of the discipline involved.

These tests, to say the least, are thought provoking, and a teacher of mathematics should keep tab on them.

With reference to supervision, the tests revealed that the best results were achieved where a specialist in a subject organized his department, and where both specialist and principal supervised the work in arithmetic.

It has been thought that at certain hours of the day the children can do more effective work than at other times, and such subjects as arithmetic and grammar were taught at times when the energy of children was supposed to be

at the highest pitch. Dr. Stone's tests showed that children did as well at one time as at another. Mr. Rice reached the same conclusion. Dr. Stone found that those systems that demanded home work got better results than those that did not. In this matter he differs from Mr. Rice. This problem should be further investigated.

Efficiency in arithmetic, then, does not depend so much on the time of day that it is taught, on the excellence of the course laid down, nor on the amount of time allotted to the subject. All these things are factors, but the greatest factor is the teacher himself, with a sympathetic and live-wire supervisor to demand a high standard and to give helpful suggestions. The teacher who can throw his personality into his work can arouse interest in arithmetic, and with interest and hard work and good methods, good results are sure to follow.

PRESENT-DAY METHODS.

In training for number work, a teacher must be made familiar with the latest pedagogical thought, which is the result of past experience, present-day psychology, and scientific tests. We shall briefly attempt to set forth a few salient facts pertaining to teaching the various subjects in arithmetic, eliminating in each case those things that are well understood, beginning with notation.

Notation.—In speaking or writing numbers, do not use "and" excepting at the decimal point. Thus 329 should be written in words "three hundred twenty-nine"; 329 is not the same as 300.029, but if "and" is used in reading the first decimal, you are in effect stating the second decimal. By using "and" only at the decimal point all confusion is avoided.

Roman notation.—Roman numerals are obsolescent. They are being replaced by Arabic numerals on watches and at the beginnings of chapters. Not much time should be spent in teaching them. Arabic numerals are plainer.

Fundamentals—First, addition.—In adding a column of figures, starting at the foot, the successive combination sums should be repeated mentally, as set down at the right of the problem here given. This can only be done rapidly if the elementary combinations have been mastered perfectly. A tremendous amount of drill work is necessary to enable the pupils to give sums at sight. No time must be allowed for counting. The pupils must be spurred on to automatic mastery of the 45 elementary combinations in addition.

8	37
7	29
6	22
5	16
2	11
9	
37	
465	
982	
763	
249	
589	
763	
31	
38	
34	
3,811	

Where two or more columns of considerable length are involved, proceed as in this addition problem. In this way accurate work is done and the process admits of interruptions. It also has advantages in checking; mistakes can easily be found. This method is recommended and employed by the civil service.

At first the emphasis in addition should be on accuracy and in neatness of figures, and then the object should be to increase the speed. The speed should increase from grade to grade. The number of combinations per minute for each grade has been marked out by Mr. Courtis for public-school pupils. The

third-grade teacher should bring her class up to the standard of 26 correct combinations per minute. The standard for the successive grades in order would be 34, 42, 50, 58, and 63 for the eighth grade.

The matter of adding rapidly and accurately is a habit formation. Prof. E. L. Thorndike conducted a test in addition with 19 university students, who added daily for seven days 48 columns of 10 numbers each. The experiment showed that improvement in speed and accuracy was about equal; that the fact that adults can improve in a skill of this kind is evidence that improvement in any intellectual trait is a matter of training. The test also showed that variability between individuals decreased with drill.

Subtraction.—The combination sums learned in addition will also be available in subtraction. Addition and subtraction should be taught simultaneously. The method of counting forward is called the Austrian method, and it should be the only method used in making change. When borrowing is involved, either the Austrian method or the "borrowing" method should be used. It would be interesting to know what process the members of this assembly use. How many use the Austrian method, the "borrowing" method? The Austrian method of counting forward is as facile as the "borrowing" method, but it is not so easily explained. I would use the "borrowing" method first in teaching deaf children.

Multiplication.—Multiplication is a short way of adding when the addends are all equal. The terms multiplicand and multiplier have very little use. In a multiplication question there are two factors, and it is required to find the product. The factors should be so arranged as to make the multiplication process easy. In the problem, How much are 3,246 pencils worth at 5 cents each? 3,246 is the multiplier; yet who would think of setting down the problem like this:

$$\begin{array}{r} 5¢ \\ \times 3246 \\ \hline 30 \\ 20 \\ 10 \\ 15 \\ \hline 16230¢ \end{array}$$

To multiply by the number of cents is more sensible.

Rapid multiplication is second in importance only to rapid addition. In multiplying, the combination results must be stated automatically, allowing no time for thought. This requires much drill work. The work will be greatly lessened, however, when the pupil understands that the factors may be interchanged and the products are still the same. Thus, 4×3 has the same product as 3×4. After the pupil has learned the table from one to six, inclusive, he has learned all the tables as far as six. In other words, the work is only half as much as it would be if the fact that the factors can be interchanged is not recognized. In training for number work, a prospective teacher must have these facts impressed on his mind.

Division.—Rapid work in division also depends on the automatic mastery of the multiplication tables. Work in short division in which each figure in the dividend is an exact multiple of the divisor is the simplest. Then come problems in which remainders are involved, and the question is, Shall we first use long or short division? Long division, where borrowing is involved, is easier than short division and should be taught first. Though the process of thought in both cases is identical, some pupils at first feel more sure when they actually see the remainders than when they hold them in mind. However, short division, because of its time-saving feature, should be taught as the final method for all divisors below ten. If multiplication tables are learned up to the twenty-times table, short division may be used to advantage with divisors up to twenty.

Where numbers of two or more figures appear as divisors, it is important to note the second figure, counting toward the right. Much time is wasted by pupils in finding correct figures for the quotient who do not pay regard to the second figure. Thus, $77295\div283$ furnishes an example to illustrate. The pupil who pays no regard to the second figure divides 7 by 2 instead of by 3; 28 is almost 30, and 3 should be used as a trial divisor rather than 2.

In long division problems the quotients should be set down above the dividends, and the first figure in the quotient should be placed above the right-hand figure of that part of the dividend first divided, as follows:

```
      320
    ------
86)27559
   258
   ---
    175
    172
    ---
      39
```

After the first figure of the quotient is set down, there must be a figure in the quotient for each remaining figure in the dividend, and this point must be made plain to deaf children, who often forget to put a cipher in the quotient when the divisor is not contained in the remainder. The above method of setting down a dividend should be a standard method.

Denominate numbers.—In learning fundamental operations, stress was laid on performing operations automatically. In the sphere of denominate numbers, a pupil should have a proper concept of every measure employed. He should make his tables from observation. Every measure should be at hand. The number of square feet in a square yard may be shown. A square rod may be laid out and the square yards mapped out on it. It may be plainly shown that there are 30¼ square yards in a square rod. An acre may be indicated on the lawn. Cubic inches and a cubic-foot box should be a part of a teacher's outfit. In the problem, A school-room is 20 feet long, 18 feet wide, and 11 feet high. How many cubic feet of air in the room? The problem may be done in this way:

```
 20 cubic feet in a row.
 18 rows.
 ---
360 cubic feet in a layer.
 11 layers.
 ---
3960 cubic feet in the room.
```

Pupils should not be allowed to say, "feet times feet equal square feet," or that "feet times feet times feet equal cubic feet." In the above problem they may say that 20 times 18 times 11=3960, the number of cubic feet. This process may be used in doing mensuration work where the work is much shortened by cancellation.

Troy weight and apothecaries' weight may be omitted but the course in denominate numbers should not be much abridged. Most of the material will be needed if the pupil proposes to take an advanced course. The subject is rich in thought work and many of the measures will be used in practical life. Every pupil before leaving the subject should know the difference between a peck and a half-peck measure. Some fruit and vegetable venders of the huckster type undersell the regular grocers by giving short measure. It would pay every householder who is in the habit of buying from hucksters to have a peck and a half-peck measure. The tendency is to sell by weight measure rather than by volume measure.

It will be interesting to children to know that long ago a piece of iron was made that was as heavy as 7,000 well-dried grains of wheat of average size. This piece of iron was called a "pound." So, the grains we speak of have a meaning. When we say that 24 grains equal a pennyweight, we mean that the English penny was as heavy as 24 grains of wheat, and this will bring up the fact that money was first weighed. There are other interesting points that might be dwelt upon. They belong to the cultural side of the study and will be omitted by those who insist that everything taught must have utilitarian value.

Fractions.—In teaching fractions, lay stress on the fact that the denominator is simply a name, the name of a part of a thing. In multiplying ⅔×4, the method is the same as multiplying two pencils by four. 4×2 thirds=8 thirds. Many analytical problems may be made plain by writing the denominator as a word, as in this problem: If two-thirds of a melon is worth 18 cents, how much is two-ninths of a melon worth, at that rate?

Solution:

Two-thirds of a melon costs	18 cents.
One-third of a melon costs	9 cents.
Three-thirds, or one melon, costs	27 cents.
One-ninth of a melon costs	3 cents.
Two-ninths of a melon costs	6 cents.

The above problem may also be set down in this way:

2)18¢ for two-thirds.

9¢ for one-third.
×3

9)27¢ for three-thirds, or 1 melon.

3¢ for one-ninth.
×2

6¢ for two-ninths.

It is the problems involving analysis that puzzle the pupils, and it is at this point that high art should come into play on the part of the teacher.

In addition and subtraction of fractions, the least common denominator should be found by inspection at first. Attention should be called to the fact that 12 is divided by 2, 3, 4, 6, and 12—the numbers generally used as denominators, with the exception of 5, 8, and 10; 120 is divided by 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 24, 30. 40, and 60. If attention is called to these facts, much time will be saved by pupils in search for a common denominator by inspection.

The problem of multiplying in which one factor is a mixed number occurs oftener than any other problem in fractions, and the solution of the problem is best set down when multiplication is made by the fractional part first, as in the following problem:

98
×18¾

4)294

73½
784
98

1837½—the product.

In dividing a whole or a mixed number by a whole or mixed number, the pupils like the method of multiplying the dividend and divisor by such a number as will produce a division problem in whole numbers, as is illustrated in the following problem: If 2¾ yards of cloth cost $11, how much is a yard worth?

Solution:

2¾)	$11
×4	×4
11)	$44

$4 a yard.

Second illustration: If 17⅜ yards of cloth cost $104¼, how much will 8 yards cost?

17⅜)	$104¼
× 8	× 8
139)	$834

$6 a yard.
× 3

$18 for 3 yards.

The advantage in this method lies in the fact that the pupils never err by inverting the dividend instead of the divisor, as sometimes happens in the inversion-of-the-divisor process, and it is at least as short as the inversion process.

Decimals.—In teaching children to read decimals, teach them to read the decimal part as if there were no decimal involved, and the denominator in each case will be a number beginning with one, followed by as many ciphers as there are figures after the decimal point. Thus:

$$.0378 = \frac{378}{10000}.$$

This also shows how decimals may be changed to fractions.

The rules for placing the decimal point may all be verified through the use of fractions. Thus:

$$\frac{3}{10} \times \frac{8}{100} = \frac{18}{1000}, \text{ or } .3 \times .06 = .018.$$

In like manner

$$\frac{18}{1000} \div \frac{6}{100} = \frac{3}{10}, \text{ or } .018 \div .06 = .3.$$

Per cent.—Per cent involves nothing new. The pupils should know the value of the more common fractions expressed in per cents, and vice versa. Some drill is needed in such exercises. Care must be taken in teaching fractional per cents. One-half per cent is not ½ or .50, but

$$\frac{\frac{1}{2}}{100} = \frac{1}{200}.$$

In like manner all fractional per cents may be made plain. The crux of the whole matter lies in the statement that per cent means hundredths.

Interest.—The subject of interest brings into play quite a variety of wholesome arithmetical thinking. After giving the subject a proper introduction, we proceed to find the interest for a year, and then multiply by the number of years. This brings out the fact that the rate of interest is the rate for a year. After the pupils have mastered this method, teach them to do the work by cancellation. In the problem, What is the interest on $650 at 6 per cent for 80 days? proceed as followings, using cancellation:

$$\$650 \times \frac{6}{100} \times \frac{80}{360} = \frac{\$52.00}{6} = \$8.67.$$

Then come the harder problems, in which the principal is a number of dollars and cents and in which the reckoning of time is involved.

Converse problems, such as finding the principal, the rate, or the time, may be omitted in an abridged course. If converse processes are omitted, since they seldom occur in practical life, the course in arithmetic will be much simplified. In taxes, commission, and insurance the rates are always known and no problems need be given to find the rate. Bank discount, as a form of interest, may also be omitted.

Mensuration.—Shall this subject be taught? If the object is to give pupils a wider outlook and to prepare them later on to take a higher course of study, it should be taught, but not by formulas. Every truth may be optically demonstrated. From finding the area of a rectangle to finding the volume of a sphere, an appeal can be made to reason; and all the ordinary processes in arithmetic, including square root, are employed. Thus, the study of mensuration offers a rich field for the pupil to demonstrate his general ability in arithmetic. So much work of an automatic nature is done in mastering the fundamental processes that we need to teach a few subjects which appeal to the mind in a very practical and common-sense way.

McClellan and Dewey, in their popular book entitled the "Psychology of Numbers," placed great emphasis on measurement as the basis of number ideas. The subject of denominate numbers and of mensuration supply the material for this kind of work, if rightly taught. The pupil should have a definite concept of each measure and of each mathematical form involved in a study of these objects.

WHAT TO TEACH.

The modern educational slogan is to cast on the scrap heap knowledge that is not worth while. All of the arithmetic which we have passed under review in this paper is essential. We think that we have stated the minimum. The follow ng criteria relative to the rejection of subject-matter has been proposed by Prof. Frank M. McMurray:

"1. Whatever can not be shown to have a plain relation to some real need of life, whether esthetic, ethical, or utilitarian, in the narrower sense, must be dropped.

"2. Whatever is not reasonably within the child's comprehension should be dropped."

We feel that we have not exceeded a reasonable interpretation of these criteria, and that from the utilitarian point alone we have not overstated the essential.

RECAPITULATION.

To recapitulate, in training for number work, a teacher must be well prepared in the subject matter itself. He should have knowledge of the historical development of the subject and of the scientific tests being made along mathematical lines. He should be a student in psychology and should know the latest pedagogical devices, and should read mathematical literature extensively, so as to gain the larger view, which comes in no other way.

Mr. JONES. This leaves 20 minutes for the two persons who are following with discussions, and we shall ask them to confine themselves strictly to their share of the time. The first is Mr. George B. Lloyd, of the New Jersey school, to be interpreted by Mrs. Temple.

Mr. LLOYD. Mr. Chairman, ladies, and gentlemen, I don't believe I will take more than 10 minutes.

I wish to draw your particular attention to the latter part of Mr. Sensenig's paper, What to Teach. The very evident demands are two in relation to teaching arithmetic:

First. That there be taught in our schools only the kind of mathematics that is useful in common life.

Second. That in this narrow field of the useful, training be directed to the cultivation of skill in the application of mathematical knowledge.

The deaf child is usually in school such a short time that all of his education needs to be as practical as possible, so that all sorts of problems that do not occur in the everyday world are to be avoided—such as, if A can do a piece of work in five days and B can do it in six days and C can do it in seven days, in how many days can the three of them do it, working together?

Mr. Sensenig speaks of some of the things that may be omitted, and I would like to add to the list. If all subjects not found in common business practice were dropped from the course of study, then many subjects will be eliminated that have consumed much time in the past, among which are cube root and square root. Then, too, the extensive teaching of G. C. D. and L. C. M. are to be avoided. There is no call, except in the machine shop, for fractions with a larger denominator than 32, or possibly 64. Business has no call for fractions that can not be easily calculated mentally. We should also use fractions that are common in business, such as one-half, one-

fourth, three-fourths, etc., and avoid such fractions as three twenty-ninths, seven seventy-thirds, etc. How frequently the boy or girl who has seemingly mastered fractions in the schoolroom goes to the shop and is unable to apply his knowledge, not being able to tell how much a half of a foot and 6 inches is; or how much a half of a cup and half should be. Then, the industrial teachers complain, and justly so.

The complaint of the business men that their young employees are not able to use skillfully the mathematical knowledge that they acquired in school is a complaint that should not be overlooked.

Business finds no place for such problems as, if four-fifths of my money is $725, how much money have I? Business seldom, if ever, requires to find the whole when a part is given, but does want to know the part that is the gain or loss related to the capital and costs.

Mr. Sensenig says that bank discount should be eliminated. To that I would add partnership, compound proportion, surveyor's measure, Troy and apothecaries' weights, paper weights, and obsolete units of other tables.

Problems in taxes, insurance, bonds, stocks, partial payments, bank discount, compound interest, longitude and time, ratio and proportion, and lumber measure should be very simple and taught chiefly for the information that they convey instead of their mathematical value.

What is there left to teach? There remains:

1. Counting numbers.
2. Reading numbers: (*a*) Integers, (*b*) common fractions, (*c*) decimal fractions.
3. Writing numbers: (*a*) Integers, (*b*) common fractions, (*c*) decimal fractions.
4. Process of addition, subtraction, multiplication, division; integers of common fractions, decimal fractions (three places).
5. Percentage application: (*a*) Trade discount, (*b*) profit and loss, (*c*) commission, (*d*) simple interest.

I would like to say here that every effort should be made to dramatize the mathematics. This may be done in innumerable ways. A class may be taken to the shop and there get an idea of how things are done, the cost of the material and the labor involved, and from the data thus secured innumerable problems may be evolved. The cost of screens for the classroom may be computed, how much lumber needed to do a given job, and its cost, and so on. Incidentally, the pupil is acquiring a lot of valuable technical or shop language, as we call it, while learning to apply his arithemetic. A store may be installed. Empty cartons may be secured from almost any grocery, price tags affixed, and one pupil made storekeeper, while the others go in and make such purchases as they desire with paper money which they have been furnished. Bargain days may be held, when everything is sold at a discount, and thus the pupil acquires an understanding of discount in a practical way, and enjoys getting it.

Interest may be taught my installing a bank to take charge of the pupils' spending money, etc. A pupil thus learns the business methods of a bank—how to make out checks, deposit slips, etc.—a knowledge that is woefully lacking among many of our graduates.

Mr. Sensenig speaks of skill. What is skill? Besides a knowledge of what and how, skill involves accuracy and a reasonable speed. This is acquired by—

I. Using mathematical knowledge in a large variety of fields in a large variety of ways.

II. Training in interpretation.

III. Training in calculation.

IV. Training in estimating results.

V. Training in checking work as it progresses.

The fact that there is little transfer of knowledge from one field to another should always be borne in mind, and the chance to apply the principles and problems learned in the classroom should be given frequently.

A person who learns a fact from a book may not be able to apply it, just as the person who learns the theory of farming may not be a skillful farmer, or the man who is skillful with tools on the farm may be a poor mechanic in the factory.

If one is to be skillful, he must know how to attack his problem; how to analyze so that a correct and reasonably speedy determination may be made of what the problem calls for, and the data given for solution.

Do not call for elaborate explanations as to what is to be done, but give much practice to what the problem calls for and how the result is to be obtained.

Teach pupils to think through a problem before beginning work and to determine approximately what the result should be. This training in estimating results cultivates a judgment that is invaluable in business.

Skill in solving problems requires not only ready judgment in interpretation, but accuracy and reasonable speed.

Speed seems to depend upon familiarity with addition, subtraction, division, and multiplication, and ability to see combinations among numbers that will simplify computation.

In addition there are 45 combinations that Mr. Sensenig spoke of that should be so thoroughly mastered that the child will recognize them instantly.

I also think, with Mr. Sensenig, that the Austrian, or making change, method of subtraction is to be preferred, so that pupils may more readily calculate mentally.

Mr. Sensenig mentions the Courtis tests as a means of testing out to find what a child should do. To develop speed in the four fundamental processes of arithmetic these Courtis tests are unexcelled.

I should like to emphasize what Mr. Sensenig said about denominate numbers. Only like things can be added or subtracted, and in multiplication only one thing, or a given number of the same thing, is taken a certain number of times. This is important, for if pupils are reasonably intelligent they must understand the nature of the process. Therefore don't say feet$\times$feet=square feet. There are two errors here. The multiplier is not abstract and the answer is not like the multiplicand. For the same reason, don't say 2$\times$3 pints=6 pints, but rather 2 pints$\times$3=6 pints.

The ability to see relation between numbers and to choose the economical way to use these relations is gained only through practice. We do not wish to train lightning calculators; the purpose of the

school is to so teach elementary arithmetic that the pupils will grow in power to understand and interpret problems that properly belong to this elementary field.

Pupils should be taught to estimate results. This training may be begun very early in school life by training them to estimate lengths, weights, etc.

The habit of checking should also be fixed early. Checking consists of repeating one process before the next one is begun.

Children rely too much on the pencil. What can be done with the mind should not be done with the pencil. The pencil should not take the place of the mind.

Stone and Rice time makes no difference.

All educators do not agree with Stone and Rice, who, Mr. Sensenig says, found that pupils did as well at one hour as at another. Tanner, for one, says that the best is from 9 to 11.

Mr. Sensenig mentioned home work, but said nothing about study-hour work in arithmetic, and I would like to hear some opinions on that subject. I think that arithmetic is a very poor subject for study-hour work. Most of the work in arithmetic should be done under the eye of the teacher, so that errors in method may be checked at once and the correct method shown, while if work is given for study hour the child may go ahead applying the wrong method and arrive at a totally different conclusion, yet quite unaware that it is wrong; then the next day he has not only to learn the correct way, but to unlearn the method he applied the night before. At best arithmetic for study hour is only a form of busy work, keeping the child out of mischief, while the time might be more usefully spent applied in the study of some subject that did not need such close supervision on the part of the teacher.

In closing, all of our work in school should have as its ultimate aim the making of good citizens, and the teacher that teaches arithmetic so that it is really useful to the student when he leaves school is the teacher who is really accomplishing something.

Mr. JONES. Now, we are just getting along fine. Last but not least we will hear from Mrs. T. F. Driscoll, of the Lexington Avenue School, for 10 minutes.

Mrs. DRISCOLL. I have only 10 minutes, and what can I say in 10 minutes? I have no paper of my own; I was asked to discuss Mr. Sensenig's paper, and I want to speak first about his point. He says that a teacher should know at once whether an answer to a problem is about what it should be. In doing our work with problems I would first have a good deal of that kind of work. "Will your answer be larger or smaller?" "Will it be about so much?" And not get such results as you do sometimes, that the cow gives more cream than she does milk, and the interest is decidedly larger than the principal.

I want to join my voice very strongly to that of Mr. Sensenig for a more thorough preparation of teaching arithmetic. It is not seemly that such a large proportion of our normal classes, our embryo teachers, simply can not do the problems that our pupils do without any difficulty whatever. I am not going to go into that at this time, but I am simply going to say that that ought not to be the case, and that in some way it should be changed.

A high school course? Yes, at least; but a high school course that gives a proper knowledge of arithmetic. Then a normal course, by all means, if we can get it. I wish we could have one or two years of a college course, in addition, for the broadening effect that it ought to give, at least, and the ability it gives to see both sides of a question; and a course, at any rate, in psychology. It seems to me that the teacher who can most clearly put her mind where the child's mind is—who can, if I might use a medical term, diagnose the case—will be the most likely to find a remedy for the trouble that exists.

Then we should have that initial preparation, the high school course—and mind, the high school course that teaches arithmetic—and a normal course of a year or two, and as much additional as we can get; and, of course, the special course for teaching the deaf. Then when the teacher takes her place in a class, or his place, is her work done in preparation? By no means. She has to read; she has to study; she should go to good schools like the Horace Mann and the School of Ethical Culture—I name those because they are in my own city—schools of that grade, where the modern method of teaching arithmetic is used, because I think we all realize that in the last 15 or 20 years the teaching of arithmetic has simply been turned topsy-turvy—revolutionized. I think the whole tendency is toward a more practical course.

We might say that our object in teaching arithmetic is to so equip the child that he can meet the problems that will confront him, because it is true that we use arithmetic every day of our lives. Take the one subject of United States money; that is taught so differently from the way I learned it or from the way I used to teach it. We have, first, writing the money, not from the work, but from the money itself. If you want the child to write $23.06 throw down two $10 bills, three ones, a nickel, and a penny, and tell him to write that in figures. That is the way it is done in those schools I have mentioned.

Then they take up making change—that has already been brought out—in a salesman's way, counting from the cost of the purchase to the money given in payment thereof.

Next is the current pay roll, and I think that has done more than any one thing to establish the relative value and position of dollars and cents.

Then the bills—how to make a bill, how to receipt a bill; how to open an account at a bank; how to make out a deposit slip; how to write a check, how to indorse it, where to indorse it; how to send an indorsed check through the mail in such a way that if you lose the check you don't lose the money.

And later on you take up the question of salary—what proportion of the salary should be spent for rent, what proportion should be spent for clothing, what proportion should be saved for emergencies which would arise.

Now, all of these things a teacher of arithmetic should know—at least should know that they are being taught as they are in all those modern schools. She should know also little methods that have been invented—improved methods.

Mr. Brown, of Nebraska, thinks he has a fine way to teach fractions, and Mrs. Jones, of Massachusetts, is quite sure she has a good

way to teach percentage. That simply illuminates the subject, and the teacher should know these. We should know the latest inventions to help our work along—the one to show fractions at a glance, and that most fascinating little invention for the arithmetical addition combination, where you touch a button and if your answer is correct the combination disappears and another one appears; but if your combination is not correct it remains there, before your eyes, to be solved again. This the children find very fascinating and very interesting and helpful as well.

Now this, of course, implies a good deal of study. The teacher doesn't necessarily take up all these devices or methods.

I have omitted really the most important thing of all, and that is interesting the child. How? Your way might not be mine; your temperament is not the same as mine; but, remember, your way and my way both must be the child's way, and the child must be interested. You can't get good work in arithmetic unless your children are interested in the subject. And perhaps one potent factor would be to interest yourself in what interests the child.

I presume you all read, as I did, in the Annals, Miss Cox's remarks on the subject in the teaching of language. I was amused where she said she knew the names of the Cleveland ball players. Well, I certainly know the names of the ball players, too, only mine are the Giants and Yankees. Now, that may be good in every subject, but especially good in arithmetic, because look at the field you have for problems there. The child who doesn't care much about percentage is anxious to learn how to find what per cent of the games his home team has lost and won, and my children have been very much interested to find the ratio of Babe Ruth's home runs to those of some other player in a rival team. If baseball doesn't interest them, try something else. Their interest in the movies can be utilized in that way. I have made problems on the salaries paid the movie stars, and those opportunities are not few.

The point is that you must interest the child, and you can make a drill not only interesting but wildly exciting to the child if you can get his point of view. One child I interested in addition combinations. He played dominoes with his father every night after supper, and he wanted to know from me just what numbers would make 5, 10, 15, or 20, so that he could beat daddy. Well, I told him. Then I urged him to learn others, that might be used in some other game. Perhaps it is not the highest motive, but it has the combinations.

Then, after all this preparation I was not going to say anything about the pedagogy; I could not add anything to what Mr. Sensenig said. Frankly, I could not have said so much, unless I had studied up beforehand for the occasion. I wanted to speak first of our course of study, but the time is so very short that I am going to drop that and just mention two or three things, except to say this one thing, that I do use the Austrian method entirely—no borrowing at all.

There isn't any use to go on with that. I will then, in the one more minute I have left, tell the points I would like to have brought out if I had more time.

First. Initial preparation, of which I spoke—the high school, normal school, and such else as we could get; then a continual preparation all through the years, as long as you are teaching.

The next step would be to not only try to get, but get, accuracy. Be sure that the child understands what he is doing and get accuracy, because you can, with every child who is not mentally defective.

Then put as much of the work as you can into the hands of the child. Our children have made splendid devices for arithmetic combinations. They made wonderful problems. Some of them I have had to take upstairs and do in the privacy of my own apartment, where they began to ask me what per cent of the Democratic Presidents came from Virginia, for instance.

The next step is to correlate all along the course—correlate with the work of the other teachers; correlate especially with the industrial work. Let them bring you their problems from the shop, from the countingroom, from the dressmaking shop. Learn how to double the receipts; learn if Mary Jones wants to have a skirt made of material 40 inches wide, with a 2-inch hem and allowing an inch for the seam, how much it will take. Let them bring their problems to you, and I assure you, if you let them, they will; they bring them to me in great numbers. Then, above all, make it interesting to your pupils and to yourself, and you will find, as I do, I think, that teaching arithmetic is a very delightful occupation, second only to teaching rhythm.

Dr. GOODWIN. I wonder if I will be pardoned for saying that I believe the poorest work in any section of the average school for the deaf in our country is in arithmetic, number work, if you please, mathematics, or whatever you call it.

I have had a good many teachers in schools in the number of years I have been there, and I have never had but one or two good arithmetic teachers, and in visiting various schools I have been impressed with that fact—that the poorest work done in these respective institutions usually has been arithmetic and number work, if you please.

I want to say that I saw some unusually good work in Mrs. Driscoll's schoolroom, and I have seen her do good work, but I have observed even the young men who have gone to college and gone away from college seem not to know anything about the real fundamentals of arithmetic, and I believe the schools that are preparing teachers of the deaf in their normal courses ought to stress the question of teaching number as well as teaching language.

Now, we all realize that language teaching is our major effort, but the average arithmetic teacher in the schools that I visited—and I will start with my own—get very poor results in arithmetic teaching.

Mr. JONES. I think we all agree with that.

A meeting of the alumni of the Clarke School, normal department, will be held at 7 o'clock in the directors' parlor in this building. It is hoped that every graduate attending the meeting will be present.

It is 4.30, and you are adjourned.

(Whereupon, at 4.30 o'clock p. m., the meeting adjourned.)

EVENING SESSION.

The convention reassembled at 8 o'clock p. m., Mr. James C. Harris presiding.

Mr. HARRIS. Dr. Crouter will make some announcements.

Dr. CROUTER. First is the announcement in regard to securing Pullman tickets by those of you who desire to do so for your home

trip. The small offices at Allen Lane and Mount Airy will not be able to handle all the business, so I think some of you would better secure your accommodations in Philadelphia, and I would advise that you do so at an early date. Don't put it off.

The second announcement that I wish to make is that Mr. Pach will make another effort to secure a photograph to-morrow morning. It was so dark this afternoon that Mr. Pach greatly feared that the trial would prove a failure, so to-morrow morning at 8.30 he will make another attempt, first, a group of all teachers, superintendents, and friends, and then afterwards a separate group for the superintendents and principals by themselves.

Mr. HARRIS. The matter which came over from the afternoon session is to be completed this evening. Dr. Johnson, of Indiana, will take a few minutes to complete the work he started.

Mr. R. O. JOHNSON. I am very sorry, indeed, that I was absent, but I waited and waited here, and the weather kept getting warmer and warmer, and I stepped out the rear door, expecting to come back the same way—but got back too late. I don't know just what Mr. Jones stated about this report of the efficiency committee during my absence, but briefly, the committee was appointed at the Staunton convention to consider all matters relative to the efficiency of schools for the deaf and things pertinent thereto. The committee met at different times in this institution, in the Ohio institution, in the Indiana institution, and in the Kentucky institution, and there was a great deal of cross-correspondence and deep research work on the part of each member of the committee. Afterwards these matters were all discussed thoroughly, not according to our prejudices in the matter at all, but with sincere thought of what would be best for the cause, and we then agreed upon certain rules and regulations, as you may call them—and outlining limitations also—concerning schools for the deaf. This report then fell to my lot to write up, and was then written by me and submitted at the meeting of the conference of superintendents and principals meeting in Columbus, Ohio, last fall. After that there was some question as to its publication—that is, as to the financial end of it.

The conference directed that the report be put into print and circulated to each member of the conference. But the conference had no money and consequently it then depended upon the institutions subscribing for a certain number of copies, so as to make possible the publication. A great many of the institutions have subscribed for 10 or 12 or 15 copies, while on the other hand a number of other institutions, I take it, through carelessness, have failed to respond: but I have enough faith in the executives of the State and other schools for the deaf, and in their love for the work, to believe that they will respond and yet do as have the others. Anyhow, we got along to a certain point where two-thirds of the necessary money was in sight for the publication of this report, which, under present conditions, has been an expensive proposition. I then took it upon myself personally to stand good for the balance, and the result is we have about 600 copies in print, coming out just the day before I left Indiana for Philadelphia, and I have brought with me a few copies. Those who have seen the book speak highly of it and feel that it should be in the hands of every teacher in the schools for the

deaf. Further than that, I may say that in reading the proof, I placed it in the hands of several educators in Indianapolis, and they felt that the book was of sufficient importance to go into the hands of teachers in elementary schools, in the public schools of the State.

Now, I only want a brief time more and I am through. I want to outline just briefly by chapter heads what this report covers. It is entitled "Standardization, Efficiency, and Heredity." Efficiency covers the school, the teacher, the pupil, and everybody connected with it, the equipment and everything; and heredity, well, if you will just stop to think, in all schools, whether for the deaf or for the hearing, heredity is the great question in the education of the young. It is well to bear in mind the trite expression, ex nihilo, nihil fit—from nothing nothing is made, from something something may be expected—and thus we have the two extremes in a wide range of mental ability; but whatever the degree or grade of intelligence of the average child, we should know it so that we may suit our actions and our efforts to the ability of the child. Speaking of education in general, we have lived so long in narrow educational "ruts" that we are inclined to think that every child should be taught along conventional lines to think and to do as we think he should think and do when he has grown to adult age instead of having what I conceive to be the correct view, that a child should be taught what he is capable of learning and doing. That, I believe, is the proper spirit in which to approach and carry forward the education of the average child; and it is in this spirit that the various problems are presented in this report, so far as purely educational questions are concerned.

Germany has provided, as tersely put by some one, "efficient specific education for specific, distinctly recognized, social classes," while we in our wisdom (?) have attempted a general education for all irrespective of class distinction, and regardless, too, it is claimed, of individuality, of intellectual proclivities, and of efficency. It would seem to me that any readjustment should be in harmony with this precept: Efficient specific education for specific, distinctly recognized mentalities, qualified by specific natural and social conditions if need be. This means the consideration and measurement of the various mental attributions of individuals under the strong rays of educational psychology.

So far as "standardization" is concerned, this is a subject concerning which I hope to address you later. I may only say here that I believe that in the hands of broad-minded and earnest thinkers and based upon the central tendency of existing practice from time to time it is possible to evolve for general acceptance by the profession unified standards of procedure and of methods of measurements of mental attributes with resultant performance that will be in consonance with modern and scientific educational requirements.

I want to say further that these few copies of the report I have here I shall be glad to distribute to-morrow, the cost price being $2 each. I am perfectly willing that these books should go out and that teachers shall have until October 15 in which to pay for them. That date means that the summer has been tided over, that the year's work has begun, and that you are again on the pay roll. I have handled too many pay rolls in the last 36 years not to know the

importance of the fall pay roll. Down in the boys' reading room to-morrow I want to give out the few books I have. Those who can not be supplied at this time will have the books mailed them immediately upon my return within the next four or five days.

In this book of 262 pages are 35 chapters dealing with a variety of subjects, a few of which I shall refer to as follows: The Committee and its duties—Terminology used in scientific and psychological examinations (and we are coming to such examinations whether we wish it or not)—The deaf and psychic development—Mental capacity and heredity—Necessary and desirable information needed in the schools for the purpose of measuring schools according to their worth—Admission questions to be asked new pupils—The function of tests and measurements of the Binet-Simon and other scales—An age-grade scale whereby any school for the deaf or for the hearing anywhere can be measured and compared in an equitable manner—Analysis of pupils—The questions of attendance, absence, etc.—The elimination of pupils (which is just as important as the admission of pupils)—Deafness and defective vision—Percentage factors for miscellaneous measurements (and by that I mean that with a given number of pupils in the Philadelphia school of 525, for instance, these factors which I have devised may be applied to that or any other number in any other school, and give you approximately the grades, the numbers in the grades, the ages, the defective vision, the degrees of deafness, whether congenital or adventitious, etc.)—Instincts and temperaments—The curriculum—Notes on the curriculum in school work—Industrial training—Physical measurements—Qualifications of teachers—Teacher measurement—Measurement of schools for the deaf—The Pintner tests (of which you will hear a good deal more to-morrow evening)—Schools for the deaf generally and their classification—The classification of deafness and heredity—The questions in hearing and speech considered from various standpoints—Deafness and adenoid growth (and I want to say to you that the indications are that one out of every five pupils throughout this great broad land of ours in the public schools is deaf in some degree, one out of every five, and the parents do not know it, the child does not know it, nor does the teacher know it, and yet that child is backward, counted stubborn, perhaps feeble-minded and treated accordingly, yet the only trouble is that the child is hard of hearing)—The hearing mute and feeble-mindedness and mutism in otherwise normal children—Two briefs, one on the development of speech and one on Meningitis and its results—Descriptive anatomy of head, nose, throat, and ear—Statistical information as to deafness—Various resolutions from time to time passed by organizations of the deaf—and a combined reference and bibliography of over 300 items. There are 6 resolutions in the book, 15 scales for measurements, 16 forms and illustrations, and 40 tables.

That, in brief, gives you an idea of what this report of the standardization committee is presenting to-day in this book, and we only ask that it be subscribed for by those to whom it will be of great use, so that we may come out even and nobody be left to bear the deficit. It is the only book of its kind ever published, and I hope it will be helpful to school executives and teachers. I thank you. [Applause.]

Mr. HARRIS. Ladies and gentlemen, the building of cities is perhaps the highest achievement of our race—the highest achievement of man. Not only does he find there the fullest satisfaction of his needs but the highest expressions of his ideas, all of his arts, and all of his institutions. It is gratifying to us, the white race, that the building of cities has, perhaps, proved better than any other thing the superiority of our race. The black race has never built a city of stone or brick. Its straw-covered huts make its villages as the highest expression of the abilities of that race.

The red race and the brown race do somewhat better. The yellow race has built some cities in eastern Asia that prove their great superiority over those other races, but the cities of Asia—of eastern Asia—are not to be compared with those cities in Europe and in America that have been builded by the white race.

Among the great cities of the world, none is dearer to our hearts than Philadelphia, and to give us the facts, to give us the growth and importance of Philadelphia, we have with us to-night an eminent statistician, Hon. A. G. Cattell.

ADDRESS OF HON. A. G. CATTELL, OF PHILADELPHIA, PA.

Mr. CATTELL. Mr. President and members of this remarkable convention, I am delighted to come here to-night, although a little embarrassed by that kindly introduction and the very kindly words spoken of this city that I love. It is an old city—a little older than I am myself. I did not come over with William Penn, but I have been here a long while. [Laughter.]

I love this city—not with a blind love, because I have lived all over the world, fate having accorded me the privilege of writing about 80 separate organized Governments, carrying me for several years to almost all parts of the world. I love the city, and I feel that you are right here in an institution which expresses and emphasizes better than anything I can state the spirit of Philadelphia, that spirit which is expressd in our motto, "Philadelphia manita," let brotherly love continue.

This dear man and this great man who for over half a century has labored to make burdens lighter and lives brighter; who has, I believe, been an inspiration to many of you in other parts of the country to do that which has mitigated and ameliorated life and its burdens for many; he stands and this institution stands for the spirit of Penn, who founded this city; and that was the splendid religion of service that we get by giving, and you have got to give first. It is the theory of my own life, which is a pretty busy one, for God has given me opportunity to talk to over 17,000,000 people, and that is a little more than the average American.

I have been working pretty hard; I haven't gone to bed the same day I got up for 50 years; I am so afraid of missing something or somebody, and at the end of a very long and a very busy life, frankly, I am more in love with life to-day than I ever was, and I want to live to be 100 years old and then renew the lease and double the rent and do my own repairing. [Applause.] I will need a new roof very soon, but I outgrew my fear of a bald head a long time ago, because you never see cheap furniture with a marble top. [Laughter and applause.]

My philosophy in life, the spirit of Philadelphia, fits in with your wonderful vocation, and I believe it is your avocation, because I don't believe you who are working and doing that which helps others can draw a very clear line between vocation and avocation, because nothing draws us away from our vocation really. But I think you agree with me that the idea of life is to get joy in the day and joy in the journey.

My dear friend Robert Louis Stevenson—Louie Stevenson, we used to call him—had a phrase he used often in our little foregathering abroad, "It is better to travel hopefully than to arrive." [Applause.] I don't want to get to the end of the journey, my friends; I don't want to arrive; I want to see always beyond me something that is a little hard for me to do, a little difficult. I echo every day of my life that splendid prayer of Phillips Brooks, my old friend, late bishop of Massachusetts, "O Lord, do not give me tasks equal to my powers; give me powers equal to my tasks." I want bigger and harder things, and along with that desire for work is a sort of spirit of content; if I can't get what I like, I like what I have got. That is a good rule even for married people. [Laughter and applause.]

As my dear friend Oliver Wendell Holmes says, "Don't work hard, but work easy, but work a lot." An old colored woman once said to me, "The Lord do one-half of the work, but it is going to be the last half." We have got to do our part first and let the imagination do its helpful part. Oh, that is the thing, the ability to let what you will, be brighter than what you are. You never see your shadow until you turn your back on the light or the sun; never.

I have a rule in life that the world doesn't owe me a living; I owe the world a life. You give it the life and you get the living, and something more—and there is no end to this; there is no good being in a hurry. I eliminated from my vocabulary many years ago one little word that brings a shadow immeasurable in its length to many lives, the little word "death." My idea of it as an accident or incident would be illustrated to you if you were riding on our elevated railroad some night. When you come to Thirty-second and Market Streets you lose the current for a second; it is dark in the car, but you pick up the new current, and on you go to a new home and friends and the dear ones beyond. An incident of an accident, because I do not believe the normal mind can contemplate its own extinction; therefore I am planning my work 100 years ahead. I expect to do it. I don't know just where or how, but I will be there anyhow, and I thank God, as I say, for life. Life hasn't lost one of its illusions to me.

I played a game of baseball last Saturday and got a two-base hit. [Applause.] I will admit that when I got to second base my breath was back on first and my heart was on third. [Laughter and applause.] I said, "If I can't keep up with this world, it will meet me in the next."

The girls are just as pretty as they ever were. I have a sign in my office in the city hall in my little room there—it has 6,000 books in it and about 30,000 records—a sign which reads, "If a pretty girl passes and I don't notice her, send for the coroner; I am dead." [Laughter.] I want to be if I am not. The Lord made man first and woman after, but man has been after woman ever since. I suppose he was around the garden for weeks or months and nothing ever happened, and

nothing ever would, until Eve came along and everything happened and everything moved. Let us get the joy of living, then we will get the success of doing. And your work, wonderful in its power to please, it always makes such a tremendous appeal to me; and that is the spirit of Philadelphia—constructive work. Penn's whole idea—and remember, Penn was a courtier before he was a Quaker. He was a Quaker by choice. He had seen the gay court life of Europe; his father was an admiral, and he had every opportunity to enter society, to get any kind of life he wanted; but he found a new pleasure, and a pleasure which some of us as we grow older appreciate more, in those contemplative thoughts, his association with scholars on the Continent, and in trying to study this marvelous thing we call life.

And the men who came with him here to America were not people who had an idea they wanted to establish a special religion or a special idea of social economy, but they believed that man given a normal environment would naturally and automatically—we might say automatically and instinctively—do the right thing in nine cases out of ten; therefore the State should be lightly seated; individual initiative should be encouraged. Those things which tend to make a healthy body should be followed, because he did not believe there was a clear line of demarcation between mind, heart, soul, and body; in other words, that body was really the temple of the living God and had its direct interrelation with the mental powers and acted with or against them. Now, he preached—and you see in all the early days, in the plan of Philadelphia, the effect of his philosophy. Nearly everyone of the new so-called German suggestions of city buildings which have been quoted so much in the last five or six years I can show you in the correspondence of William Penn suggested 235 years ago—schools, a garden, playgrounds—why, every house in Philadelphia in the original plan was to have its own garden to keep the children out of danger of traffic; it was to have its own yard and garden, where vegetables would be cultivated. so the child could see nature in a productive mood, doing something, adding something to the being and betterment of others.

There were to be rows of trees between each house, giving a certain privacy and seclusion so that the child could learn in the home the lessons that can be learned nowhere else, and the lesson we have all got to learn, obedience to command or law, not because it was understood but because the child had confidence in and love for the lawgiver. Our economic disturbances of to-day, the chaos that is ruling in Europe, is largely due to the desire of each man to interpret every law for himself, and if he does not agree with its principle it is to blame. In other words, we have lost the law-abiding spirit which is necessary for orderly government, and we have got to come back to that. No man can comprehend the meaning or necessity of every enactment, consequently there must be confidence in our rulers, confidence in our lawmakers, and a willing obedience to law while it remains law, or nothing is ever finished.

Life is a great game of baseball, and playing baseball means hitting the ball, not the umpire [laughter]; but we have all started to find fault and to criticize and to stop creating. I once tried to play a game of baseball without an umpire; I got licked three times in the first inning, and we never played the second. [Laughter.] Every-

body who has ever played a game of ball or any kind of sport game knows that some time in the game he thought the rules were wrong and the umpire unfair. It is so in real life. The judges, who are the umpires, make mistakes; they are fallible, but if we don't accept their dictum the whole course of orderly government stops. The laws are the rules; if we don't obey them until they can be changed and bettered the game is never finished, and neither players nor spectators get anywhere.

So with the knowledge here must come the power to understand, and the comprehension is the truth that Emerson spoke of, "We are strong by our relatedness, not by our power of penetration," It is not merely how high I can think or how deep I can go in my thoughts, but whether I can make my efforts link up with my neighbor's, and working together we can produce a force which is irresistible for good. Our power of relatedness—and that is a heart-born policy rather than a head. The German Empire to my mind is an illustration of an intellect that divorced its soul by overfeeding its mind and starving its heart, which is the seat of the equities. When they came to measure the actions of others nations along equitable lines they failed every time. They thought Belgium would not struggle; it did. They misread the heart of Belgium. They said England would not fight; they misread the heart of England. They said America would not fight; they misread the heart of America. Why? Because the mind had been overfed and the heart, the seat of the equities, had been starved, and when they came to measure heart qualities they lacked the standards and the ability.

And so in America it seems to me we have got to comprehend the necessity of building an all-around citizenship, a man that feels and a woman that feels true and kindly, as well as thinks straight and clear. The two must go hand in hand, and with that the healthy body to have the normal environment. We must all become psychologists, we must all measure things and handle things dealing with things that are, not as we would have them. Now, Penn's idea was to give that normal environment. If the State could be lightly seated, the expense of control would be light and the taxation would either be very lightly levied or it could be devoted to things for the general good. Now, the consequence is you will find that in Pennsylvania each generation has furnished the capital for the next. As a people we have borrowed less money from other communities than any other State in the Union, and my estimate to-day is that the wealth of Philadelphia per capita is over $6,000, nearly three times the average of the whole country. In Philadelphia to-day we have 160,000 people who own the homes they live in. That is in contrast with about 80,000 taxpayers on real estate in the city of New York, with three times our population. We have over 300,000 people who pay taxes on property in this one city. Twenty-five of the States of the Union have smaller populations than we control here in our own immediate city, and we have never grown large like New York and Chicago, by taking in other communities, for our present area, 129½ square miles, marks exactly the settlements founded by Penn 237 years ago, exactly where he came in. We haven't added 50 acres in 237 years to our territory. It is a normal growth.

The city started with those trees along the streets that are suggested improvements, trees between each house and then there was

a wonderful scientific wave developed which announced the startling statement that trees spread contagion, and we lost thousands of trees that were cut down to keep smallpox and measles from going from branch to branch and tree to tree and thus through the human race. There was another scientific dictum that trees spread conflagration. And you can see in certain old houses in Philadelphia a plate with a tree on it that represented The Green Tree Insurance Co., the only company that would insure a house with a tree in front of it, to show how deeply the idea had formed and taken root in the popular mind. But when Penn first planned the city he devoted a larger area to open spaces than any other city then existing in the world, over 8 per cent of the area. Over 8 per cent of the city was given over to public parks and squares, and to-day we maintain that in our present day we have over 90 parks, with 80,000 acres, not parks on the outskirts, but parks through the city. All around we have open spaces within walking distance of everyone.

There are 390,000 dwellings in Philadelphia. If you want to make a 3-minute call on each house in Philadelphia and start now, it would take you 12 years just to stop 3 minutes at each house, and yet in normal times we build a new house every 20 minutes, so that the problems are not all solved, because new problems are coming.

I was rather startled to notice that the total population of the State of Delaware, which was announced to-day, is about 30 per cent—40 per cent less than the gain which Philadelphia has made in the last 10 years. Now, there is a State with two members in the United States Senate, representation in Congress, and all the machinery of Government, county, and State, where the total population at the present day does not represent the gain in 10 years in this one community. I mention that to show the size of the problems we have to handle. Delaware, fortunately, breeds big men, high men—Ambassador Bayard, one of the greatest men, I think, I ever met, and one of the most brilliant. I happened to be living in London when he became our first ambassador to the Court of St. James, the first ambassador the United States ever had.

But that was the start of Philadelphia. It started with that idea, to give people power to express themselves, to make them thrifty, give them a love of life, give them a healthy body, and then turn them loose and let them go, and they did. The city has grown continuously, and is to-day increasing in a more healthful ratio than ever before. We have a greater number of home owners in proportion to the population than any other city in the world, and we have in our savings institutions, in one institution alone, over $150,000,000 of laborers' money, 300,000 separate workers who have accounts or savings. We had one strike here with 135,000 men out for six weeks, and not a soul was injured, and the total loss of property was less than one ordinary fire, merely because the people owned their own property and were not going to start fires or fight where their own property might be hurt. That is merely an illustration. I am not speaking of Philadelphia to boast of it, but as an illustration of what I believe the spirit of America is and the spirit to which we are coming, that the home is to be the center of our national life; that the redelegation of authority to smaller bodies and smaller communities is going to increase; that we are going to realize that no

one person can do any great thing without help, and that we are strong by our relatedness, rather than by our power of penetration.

This wonderful institution you know all about; you know about the other ones, such as Girard College. There is an institution with $40,000,000 endowment that has put 10,000 equipped young men into the service of America since it was founded. It was founded by a poor fellow who came here poor, came to America from France, and who showed the finest side of his character when in the great epidemic of yellow fever, and some of our own citizens were deserting the city, he went into the huts and hovels and the courts and the alleys, and put his life in peril to help the dying, and help to nurse back to health the ill; and as he was giving his heart and soul for others, he conceived that which he afterwards was able to put into effect with his endowment of $40,000,000. In that institution to-day they are protecting as a foster mother 1,500 orphans. I think the spirit of America is that spirit.

My friend I. V. Williamson—dear old man—people thought he was unnecessarily close and he died leaving $2,000,000 to found a trade school, and they have now there 40 buildings and still have the $2,000,000 left, and have put 3,000 trained engineers and various mechanically-trained people into the service of the Union.

Our art schools and our trade schools have given us a certain preeminence in manufacture which nobody can take from us. They have been liberally supported and we have cultivated along with the brawn of the people the brain of the people until our 300,000 skilled laborers are anchored here through ownership of homes, expressing their belief in a higher power. We have 900 churches embracing nearly every form of expressing man's belief in a higher power, and over 450 schools, parochial, public, and private, which look after about 450,000 of the younger generation. I feel that Philadelphia and the country at large, of which Philadelphia is merely a type, has nothing in the world to fear from this old world talk of bolshevism—not the slightest.

I made the statement at Atlantic City before 3,500 bankers the other day that 93 per cent of our labor was loyal to the American home and home life, as opposed to the newer idea, and I think I am right.

I am very glad to come here and say just a word about this city that I love; more particularly about this life that I love. We are all here for service, and I think, as I say, we ought to get joy out of life and we have got to draw the long bow some time. You have got to hold yourself down to hard tacks so much that you have got to rest yourself some times. The other night I had a lesson taught me in a very bitter way. I was showing a young English friend of mine Broad Street and at everything I pointed out to him, he would say, "We could do it in half the time in London." I lived in England 10 years, and I love London, but at the same time I knew he was drawing the bow pretty well. I thought I would take a little leaf out of his book, so I pointed to the Bellevue and said, "There is a nice little hotel we put up in six weeks." He looked at it and said, "Six weeks; a month would have been enough—ample." [Laughter.] He raised me nearly out of the game. When we got out to the North American Building he looked it over and said,

"What is that big building?" I said, "I don't know; it wasn't there yesterday." [Laughter and applause.]

I remember one time a man was talking to me about the speed of trains in certain parts of South Africa. I told him the experience that I had out on the Northern Pacific road. I helped to build that old Northern Pacific Railroad; I was associated with Jay Gould in 1873. I sold the bonds when nobody believed in the great Northwest. I knew what it stood for; I knew what the Pacific coast stood for, and I believed in it then. I was riding on a train in the early days out there, on the engine, when the engineer said: "You notice that farmer crossing the track about 3 miles ahead?" I said, "Yes." He blew the whistle, gave a long blast of warning, and then he struck that wagon and knocked it all to pieces, and we ran nearly a mile before he could stop, and then we went back and were just picking up what was left of the wagon when along came the whistle. [Laughter and applause.] Now, we have got to travel fast, but we don't expect things quite as fast as that. But we want loyalty to our profession, it seems to me, and to our locality. I do love old Philadelphia and try to stand up for it, and I put the best points in the front. It is easy enough to find fault. Oh, that is so easy.

I had the pleasure of making an address to San Francisco a couple of years ago with a long distance telephone. It made a wonderful impression upon me, because 51 years ago the 13th of this August I went across the continent on the first train that linked the Atlantic and the Pacific. A committee of us went through. We had Senator Thurman and a number of the other Senators, and Mr. Cappell, a relative, and it was a wonderful trip, but it took me 10 days to get my personality from this side of the continent to the other. The other night I picked up that telephone and talked to 1,600 people in a theater in San Francisco, and it took my personality the thirtieth part of a second to get across that same distance [applause]—a thirtieth of a second to come back. In the fifteenth of a second my personality had crossed the continent and come back—7,200 miles—and yet when I was young it took me 10 days to traverse half of that. The age of miracles has not passed. As the French say, everything is possible; it is done; if it is impossible, we will do it.

I told that audience a little story that I want to tell you, because it reflects my spirit. I said, "You have got good citizens in San Francisco. They are loyal to their city. I like them. The other night in the Bellevue I saw a man talking to a crowd, and he didn't seem to carry it with him. I went over there and listened, and he was bragging about San Francisco. When there was a lull I cut in and said, 'This man is telling the truth, absolutely. He isn't exaggerating at all; I have been there.' Your citizen turned to me and said, 'When were you there?' I said, 'Three weeks ago.' He said, 'Oh, Lord, you ought to see it now.'" [Laughter and applause.] Now, that is my idea of every man. Three weeks ought to make ancient history of what he was or what he is doing, or of a community. We have got to grow in these splendid days, and thank God for the opportunity of growing; thank God for the opportunity of having good pacemakers; thank God for these wonderful powers of thought and imagination and the marvelous new combinations that are coming into life, that bring into play new nerves, new powers

of mind and heart and soul. America found its soul during the war. The whole world is coming on to a higher plane; we get by giving what we have got, but we have got to give first, and we gain by using.

If I tie my arm to my body it doesn't save my muscle because I lose the arm. And so by going out into the lives of other people, how it enriches our life and how I envy you in your wonderful ability to bring within the range of possible avenues for enjoyment—avenues for feeding the souls of those who otherwise might starve.

I stood this winter on a cape in Florida alongside of one of those old lighthouses built by the Spaniards long before Florida came into the hands of the United States. For two hundred and odd years that old lighthouse had stood as a beacon, as a guide, as a warning. I was all alone that beautiful morning. It seemed that the smile of heaven was in the sky and was reflected with a kindlier tenderness because of earth in those beautiful waters, and I stood there feeling a little depressed because of lowered physical condition. It seemed to me I hadn't done much or gotten anywhere, and leaning against that old lighthouse I said, "Well, you haven't moved far, traveled very far, but perhaps thousands that you have saved from shipwreck will think of you when they get to port." And the thought came to me that maybe if I didn't reach the success or that El Dorado we all want to reach, perhaps a few of those who reached there would refer to the old pointing finger of the man whose chief motive in life was to have a large bureau and have a large lot of people sorry when he was gone away. I think that is not a very low motive to have, to try to have the closing sunset of our life one in which many friends are about us, one in which we hear voices not only from the other side welcoming, but of "God bless you" in the receding silence of this world.

Thank God for life, and on each day and each hour of each day make somebody else thank God that we live and love and labor, and love our labor. [Prolonged applause.]

Mr. HARRIS. We will now take a look backward on the history and the growth of the American schools for the deaf, a paper by Mr. Frank R. Wheeler, of the American School.

Mr. WHEELER. Mr. Chairman, members of the convention, there are certain disadvantages in following such a distinguished speaker as we have listened to this evening, but there are also advantages, inasmuch as I can see that he has left you fully awake, and you seem to be in somewhat of a receptive mood and good-natured, and so I feel that I can begin.

GROWTH OF AMERICAN SCHOOLS FOR THE DEAF.

By FRANK R. WHEELER.

It is always interesting to study the growth of a nation, to investigate its founding, to learn of the men of vision and sturdy endeavor who were identified with its early history, to find the reasons for its development and growth. It is a fascinating study also to trace the growth and development of a new movement, of a great idea, but it necessitates a delving into the past. At this time, when we are all occupied with the solution of present problems, I am somewhat reluctant to present so much from the past for your consideration. Nevertheless we must turn for a little while to the early years of the nineteenth century.

Come with me to Hartford—not the magnificent Hartford of to-day, but the village of 1817, which slumbered peacefully on the west banks of the Connecticut River; for to Hartford belongs the honor of successfully founding the first school for the deaf in America. Here in an old mansion we can see Gallaudet and Clerc with their little flock about them soberly and prayerfully inaugurating the new movement which has meant so much to thousands of children. Dr. Cogswell must have been there, also, to enter his daughter as the first pupil of the new school. Oh, that a motion-picture film could have been made of that wonderful first day that we could see to-night those boys and girls gathered about their new-found friends and teachers, but dimly comprehending what was in store for them. From this humble beginning has come in a little over a century 163 schools for the deaf, with an enrollment of nearly 14,000 pupils.

Lack of time permits me to mention only Gallaudet's journey to England in 1815, his visits to the schools at London and Edinburgh, his attempts and failure to learn the English method of teaching the deaf, his arrival in Paris, his hearty welcome by Sicard, his study of the French method, and the decision of Clerc to accompany him to Hartford.

Evidently in 1817 the time had come for a general awakening to the needs of the deaf, for on the 15th of April, the very day that the Hartford school opened its doors, the New York Institution for the Deaf was incorporated. Two previous attempts had been made to establish schools in New York City, but both had failed. The New York institution was not opened, however, until 1818, owing to lack of teachers; but finally Rev. A. O. Stansbury, who had been the steward of the Hartford school its first year, was appointed teacher and began his work with four pupils.

An effort had been made in Philadelphia in 1816 to teach the deaf, but not until 1820 was a board of directors organized. In November of the same year a house was rented on Market Street and the school opened with 18 pupils. The Hartford, New York, and Pennsylvania schools were, and are still, private corporations receiving State aid and a considerable income from invested funds. Kentucky, in 1823, was the first to establish a State school. Up to 1840 only two more schools were opened, Ohio in 1829 and Virginia in 1839. From 1840 to 1850 schools were started in Indiana, Tennessee, North Carolina, Illinois, Georgia, and South Carolina. From 1850 to 1860, Missouri, Louisiana, Wisconsin, Michigan, and Mississippi established State schools.

It has been said that Gallaudet's acceptance and adoption of the French method was an accident. It might be said with equal assurance that the rescue of Moses from a watery grave to lead a mighty nation, that the escape of Joseph from the pit to become a great statesman, that Paul's transformation from the persecutor of a new sect to its greatest apostle were also accidents. The method introduced into the United States by Gallaudet was not an easy one to master, and he was obliged to seek men of education, culture, and piety as his assistants. These early teachers were practically all college graduates—nearly 30 graduates of Yale alone have been instructors in the Hartford school—men of enthusiasm, conservative to be sure, but eager to assist in the betterment of the condition of the deaf, tireless in their efforts to save the souls of their pupils as well as to develop their minds, stern in matters of discipline. But they molded the lives of those intrusted to them so carefully that their teachings were powerful factors in giving to State and Nation hundreds of worthy citizens. The pioneer schools for the deaf needed strong men. Such men were found and they did their work exceedingly well.

The American School at Hartford served for a considerable period as a normal school, and provided teachers, principals, and superintendents. Every new teacher at Hartford took a regular course of Mr. Clerc in the sign language, for which he paid $50. The influence of the mother school continued to be felt for years by the other schools, but the method of instruction by signs, little by little, was revised, corrected, and expanded.

No attempt was made to teach articulation at Hartford, and in 1819 the authorities considered it a waste of time. In the report of 1831 we read that "all efforts to accomplish articulation are now considered useless and are wholly abandoned." Mr. Stansbury attempted to teach articulation in the New York institution to pupils who had speech or partial hearing, but results were unsatisfactory, as no trained teachers were available.

One writer in 1834 complained of the amount of time spent in creating institutions for the education of the deaf and thought more time should be taken in perfecting those already established. He stated that no articulation was

taught; that the public at large knew nothing about the methods used at the various schools and deplored the lack of sufficient funds. He also advocated a congress of teachers, as the isolation of the different institutions prevented profit by common experience.

For over a quarter of a century the method of signs continued to be used. Apparently no lasting effort was made to introduce any other method until the report of Mr. Horace Mann and Dr. Samuel G. Howe upon the oral method used in the German schools for the deaf was given out to the public. This report of the visit made by these two gentlemen to Germany in 1843 and their investigation of the schools there aroused the Hartford school directors to such an extent that they immediately sent Principal Weld to Germany, accompanied by Prof. Day, of Yale University, who had previously taught at the New York institution. Prof. Day was not favorably impressed by the work done in the German schools, but Mr. Weld recommended that semimutes and semideaf pupils be given instruction in articulation. The teaching of articulation was at once begun, but apparently too little time was devoted to it, too few pupils were given an opportunity to practice it, and there was no real enthusiasm on the part of those teaching it.

A French teacher, who had also visited the German schools, in a letter to Mr. Weld suggested that it would be much easier to introduce instruction in articulation into a new school than into an old one where the language of signs had acquired a great development. His solution of the problem proved to be the correct one, but not until 20 years later, in 1864, was an attempt made to incorporate an oral school. This attempt, which was made in Massachusetts, failed, but in 1867 Miss Rogers's school at Chelmsford was removed to Northampton and incorporated as the Clarke School for the Deaf by the Legislature of the State of Massachusetts. In the same year Dr. Gallaudet visited a large number of schools in Europe and in the following year presented a resolution before the first conference of superintendents and principals, held in Washington, D. C., which stated that it was the duty of all schools for the deaf to provide adequate means of instruction in articulation and lip reading for all who could profit by such teaching. This resolution was adopted by the conference.

The opposition of the Hartford School had prevented the incorporation of a new school for the deaf in Massachusetts in 1864. There is no doubt as to the sincerity of this opposition as the Hartford teachers believed implicitly that their school could educate all the deaf children in Massachusetts, as it had done for nearly 50 years, and that their method was the correct one. We must remember that the other schools also were satisfied with the same method of instruction and had done little to introduce a new one.

The following reasons for the rejection of articulation were given by the principal of the Hartford School in 1866:

1. Too much time is lost in teaching sound, which is of no benefit in mental culture.
2. Under this system a large number of deaf-mutes must be left without instruction.
3. The intonations of the voice and the distortion of the countenance in teaching and practicing articulation are disagreeable.
4. Success in articulation teaching has come principally to pupils who retained their speech after becoming deaf.
5. The ability to converse in general society is not secured by this method of instruction.
6. More teachers are required, resulting in more expense.
7. Religious instruction must be deferred, and religious worship is almost impossible.
8. In teaching articulation signs are still indispensable.
9. Lip reading must be taught also.
10. The results of instruction by signs are beyond those attained by articulation.

A necessary change of method in any line of endeavor is apt to meet with opposition when first introduced, but honest opposition only strengthens and aids in its final adoption. So the early opposition to the oral method has not prevented its growth and its use in nearly all of our American schools for the deaf. Last year over 11,000 of the 14,000 pupils were taught speech, and 2,500 were enrolled in schools where the use of signs is not permitted.

The New York Institution for the Improved Instruction of Deaf-Mutes was established the same year as the Clarke school, and two years later the Horace

Mann school was opened in Boston. These three schools may be considered as the pioneer oral schools.

The Horace Mann school is also the pioneer day school for the deaf. Although this school was opened in 1869, it was not until 30 years later that day schools began to increase rapidly in numbers. These schools are a part of our public-school system and all except 5 of the 78 use the oral method exclusively. Their present enrollment is over 2,000 and the most of them are found in five States.

The value of industrial training for the deaf was recognized by Gallaudet as early as 1822 and, as he desired his pupils to be self-supporting after leaving school, trades were taught to them. For many years only a few trades were taught in our schools for the deaf, but in recent years the number has been greatly increased, especially in the larger institutions. Over 90 trades are listed in the Annals of last January.

A great many of the boys do not follow the trades which they have learned in school. But this does not necessarily indicate that industrial training in our schools is a failure, as the limited time spent in learning a trade does not permit a complete mastery of it. It is claimed that the habit of work and the knowledge of tools, combined with intellectual development and character, form a sufficient preparation for every-day life.

War-time conditions have caused the recognition of the deaf as reliable and skillful operatives in the factory. But these conditions are only temporary, and we should not lose sight of the value of a knowledge of the building trades, printing, baking, farming, and gardening, although in the Eastern States more tempting opportunities for employment will still be found in the large manufacturing plants. We are proud of the records made by former pupils of our schools, for as a rule they have made good in the trades and professions which they have followed in mature years, and we should continue to impress upon our present pupils the importance of work and the necessity of laying the foundations in early years for a successful career.

In recent years more attention has been paid to the partially deaf and hard of hearing. In some schools classes in auricular work have been formed and a few schools for the hard of hearing have been opened in our cities.

Music, military drill, and rythm work are used in a number of our schools with very satisfactory results.

In our first schools for the deaf all the teachers were men. They were expected to remain, if possible, in the same school in which they had begun to teach, as it was thought that changes impaired the efficiency of the schools. The leaving of the profession of teaching to engage in other lines of work was severely condemned. College graduates were sought as teachers, and they consecrated their lives to the deaf with the same zeal and devotion which has ever characterized the pioneers of a new movement. These men considered themselves missionaries to the deaf, and as much of the money used for the support of the schools was raised by private subscription it was inevitable that the schools should be considered as charitable institutions. More and more in later years the schools have come to be regarded as educational institutions, but there is a constant demand in some States for a change of laws so that all schools for the deaf may be properly classified. This convention and the National Association of the Deaf have both declared that the deaf should be given an education by the State as matter of right, not of charity, and that all schools for the deaf should have standing in the law as a part of the public-school system.

For many years no women were employed to teach in our schools. But as the age at which pupils were admitted was gradually lowered from 12 years to 5, or even less, it became necessary to employ them in constantly increasing numbers. The introduction of the oral method also caused a steady demand for more women, especially in the primary grades, for no man has patience enough to teach little children, deaf or hearing. Seventy years ago only four women were teaching in our schools for the deaf, but now nearly 75 per cent of our teachers are women.

Some years after the establishment of the first school at Hartford it became customary to train as teachers some of the graduates of the school, and the other schools also realized the value of the deaf as instructors. At one time over 40 per cent of our teachers were deaf, but the growth of the oral method has gradually decreased the number of our deaf teachers. However, those

who remain in the manual departments of our combined schools are regarded as most valuable teachers.

It has always been found necessary to call the attention of parents of deaf children to the necessity of educating them, as many parents seem unwilling to send their children to our schools after their rejection by the public schools. Compulsory attendance laws for the deaf have been enactetd in a number of States, but in others there is no way to compel ignorant parents to send their deaf children to school, and even if they finally consent to their stay in school a few years they can remove them at any time and place them in the factory.

Although it was long felt that the teachers in the different schools should be able to profit by their varied experiences in teaching, it was not until 1847 that the publication of the Annals was undertaken by the instructors of the American School. It was taken over by the convention when the latter met for the first time in 1850 at the New York institution. It was not issued during the Civil War, but in 1868 its publication was assumed by the first conference of superintendents and principals.

The organization of the convention of American instructors of the deaf, the founding of the Volta Bureau in 1887, and of the American Association to Promote the Teaching of Speech to the Deaf in 1890 have been of great assistance in the more recent growth and development of our schools.

It was inevitable as the education of the deaf progressed and the number of schools increased that the higher education of the deaf should be considered, and 47 years after the founding of the first school, Gallaudet College was opened with Dr. E. M. Gallaudet as its president. The graduates of this college have filled many responsible positions and many of them have become teachers. Its normal department has trained a good many teachers, also a number of principals and superintendents.

We hear much about Americanization in these days, but schools for the deaf have been doing this work for years and are the real pioneers. In some schools 80 to 90 per cent of the pupils are of foreign parentage.

Conditions since the beginning of the Great War in 1914 have severely tested our American schools for the deaf, and most of them have struggled on with yearly deficits, having been forced to meet the increased cost of everything with but little help from State legislatures. We sometimes feel that the year 1920 is separated from 1914 by a century, as we see the changes that have taken place along all lines which affect our daily living. There have been differences of opinion among us in past years, and we do not agree entirely on all things to-day, but we must remember that the four Gospels were written by four different disciples and no two of them had the same conception of the life work of Christ. Some of us would banish the language of signs, by an amendment to the Constitution if possible, although the personal liberty of thousands of our fellows would be interfered with, while others consider the sign langauge as the great universal language. Some of us would obliterate all combined schools, while others would not hear to it. Some would forever do away with all residential schools and establish day schools, while others would never permit it. But, after all, we believe in the same things, although we advocate different ways of doing them; so let us carry on conscientiously and tirelessly, ever with an upward look to Him who guides all righteous causes.

Mr. HARRIS. I will recognize Supt. Jones to make an announcement.

Mr. JONES. The members of the several committees interested in a survey of all the schools for the deaf by one of the foundations will meet in the trustees' parlor immediately upon adjournment. You will know whether you are a member of any of those committees—one belonging to the convention, one to the conference, one to the association, and one to the progressives.

Mr. HARRIS. Is there anything else to be brought before this session? If not, the session stands adjourned.

(Whereupon, at 9.10 o'clock p. m., the meeting adjourned.)

FOURTH DAY, THURSDAY, JULY 1, 1920.

PROGRAM.

8.45 to 11.15 a. m.:
Demonstrations and discussions, as on Tuesday and Wednesday.
11.20 a. m. to 12.20 p. m.:
Business meeting, American Association.
2 to 4.30 p. m.:
Dr. Augustus Rogers presiding.
1. Paper on "Correlation of Industrial and Academic Departments," by Supt. Alvin E. Pope, of the New Jersey School. Discussion led by H. J. Menzemer, superintendent of the Montana School.
2. Paper on "Physical Training," by Mr. Corbett T. Arnold, of the Mount Airy School. Discussion by Mr. Isaac B. Gardner, of the New York Institution.
3. Paper on "Vocational Training," by Supt. J. W. Blattner, of the Oklahoma School. Discussion by Mr. T. Emory Bray, superintendent of the Wisconsin School.
4.40 to 5.40 p. m.:
Business meeting, Society of Progressive Oral Advocates.
8 to 9.30 p. m.:
Superintendent J. W. Jones presiding.
Paper by Dr. Rudolph Pintner, of the Ohio State University, on "Standardization of Schools for the Deaf. Discussion by Dr. R. O. Johnson, formerly of the Indiana School; Dr. E. B. Twitmyer, of the University of Pennsylvania; and Supt. H. M. McManaway, of the Virginia School.
10 p. m. to 12 p. m.:
Cards and dancing.

The thirtieth annual meeting of the American Association to Promote the Teaching of Speech to the Deaf was held in the auditorium of Wissinoming Hall, School for the Deaf, Mount Airy, Philadelphia, Pa., at 11.20 o'clock a. m., July 1, 1920.

In the absence of First Vice President John D. Wright, the meeting was called to order by Second Vice President E. McK. Goodwin at 11.20 o'clock a. m., July 1, 1920.

Mr. Forrester, chairman of the committee on resolutions, read the following tribute to the memory of Edmund Lyon, late president of the association:

In the passing of Edmund Lyon, late president of the American Association to Promote the Teaching of Speech to the Deaf, we, the members of the association, feel that we have sustained an irreparable loss. Because of his great interest in our association, his practical knowledge of the teaching of speech to the deaf, his invention of the Lyon Phonetic Manual, his fine business judgment, his broad-mindedness, his geniality and fine sense of humor, and his noble character he was peculiarly fitted to fill the office he held. Our association has been the recipient of most substantial contributions from his purse; but these, and all that he gave of himself in time and effort to the education of the deaf, were gifts of love.

We, the members of the association assembled at Mount Airy to-day, therefore resolve that this very inadequate tribute to his memory be placed in the records of the association, and that our deepest sympathy be extended to Mrs. Lyon and all the members of his family.

This resolution was unanimously adopted by a rising vote.

The acting secretary, Mr. Pope, read the report of the secretary, showing a continued increase in the number of members, and the report of the treasurer, and both reports were duly accepted.

Dr. Max. Goldstein read the report of the permanent committee on the deaf child, selected at the last meeting of the section on laryngology and otology of the American Medical Association. (Chair-

man, Dr. Charles W. Richardson; Dr. Elmer L. Kenyon; secretary, Dr. Max. A. Goldstein.) The committee of the American Medical Association had adopted the following resolutions:

1. Wright resolution making deafness a reportable disease:

Resolved, That steps be taken to make impaired hearing in children reportable, and to endeavor to have such an act passed by the legislature of each State or by other proper governmental agencies. By such legal and protective measures it may be made possible to safeguard the interests of the deaf child in every State and to keep in touch with his educational opportunities as readily as with the hearing child.

2. Resolution asking for abstract of laws and other information:

Resolved, That the American Medical Association be requested, through its secretary, to furnish abstracts of all legislation in regard to the deaf child in all States where such legislation has been enacted, and also to furnish information to this committee of all States in which no such enactments have yet been made.

3. Resolution indorsing the instruction of deaf children by the oral method:

Resolved, That we recommend exclusively oral instruction of deaf children, and that the oral teaching of the congenitally deaf child and of the child who acquired deafness be made a part of a department of the public-school system, so far as possible, in all communities.

Resolution requesting cooperation of physicians with school authorities in all communities:

Resolved, That medical men in all communities should uphold this committee in connection with all efforts made toward improving the instruction of the deaf child, and that all medical men use their personal influence with school boards and superintendents to the fulfillment of the various suggestions of the committee.

Following the reading of that report, Mr. A. E. Pope moved that it be referred to the board of directors of the association, with power to act. This motion was seconded by Mr. J. W. Jones. Mr. F. W. Booth offered a substitute motion to the effect that the association indorse the report as far as possible. This motion was seconded by Mr. Clarence Manning. Then Mr. H. M. McManaway requested that he be allowed to introduce a motion to the following effect:

First, moved, that the association has heard with pleasure of the interest of the American Medical Association in the problems of the deaf child, and welcomes the assistance of the American Medical Association in all efforts to reach a satisfactory solution of these problems.

Second, that a copy of the resolution adopted by the American Medical Association be filed with the secretary of this association.

Mr. Pope, with the consent of his second, and Mr. Booth, with the consent of his second, withdrew the motions before the house, and Mr. McManaway's motion was unanimously passed.

The following directors were elected to fill the vacancies occurring in 1920: Miss Sarah Fuller, Dr. E. McK. Goodwin, Dr. Harold Hays, Mr. Alvin E. Pope (to succeed themselves), and Mr. A. C. Manning (to succeed Mr. Franklin K. Lane).

It was moved, seconded, and voted that the acting president of the association be authorized to appoint a committee of four to be members of a joint committee, appointed by four organizations, with the object of securing funds to carry on a survey of schools for the deaf.

Vice President Goodwin announced the appointment, as members to represent the association on this committee, of Dr. A. L. E.

Crouter, Dr. Harris Taylor, Miss Enfield Joiner, and Dr. J. C. Harris.

Adjournment followed.

AFTERNOON SESSION.

The convention reassembled at 2 o'clock p. m., Dr. Augustus Rogers presiding.

Dr. ROGERS. Let us come to order for the proceedings of the afternoon.

One of the important factors in the problem of education of the deaf is that of industrial training, and so we have on our program this afternoon two very important papers on the subject.

It is my pleasure to introduce to you as the first speaker of the afternoon Supt. Alvin E. Pope, of the New Jersey school, who will read for us a paper on the correlation of industrial and academic departments. This discussion will be led by Supt. Menzemer, of the Montana school, who will take the place of Dr. J. R. Dobyns, who could not be here on this occasion.

Mr. POPE (reading):

CORRELATION OF INDUSTRIAL AND ACADEMIC WORK.

By ALVIN E. POPE.

"International expositions are milestones in the progress of civilization."

Three international expositions have been held in the United States. One in Chicago in 1893, one in St. Louis in 1904, another in San Francisco in 1915. The writer was privileged to be connected with the educational activities of the last two. The educational exhibits at the St. Louis exposition had several distinctive features. First and foremost was an exhibit of the thoroughly organized educational system of the German Empire. At that time it was considered a marvelous representation of the most perfect educational system ever known. Second in interest was an exhibit by the Chinese Empire of a system of classical education, more intricate and more comprehensive than any classical system known to the civilized world. The most striking feature of the United States' exhibit was a display by the higher educational institutions which were organized on a classical basis, and which more or less dominated primary and secondary education. Next in importance was an exhibit of the methods of instruction employed in teaching the deaf and the blind.

At the San Francisco exposition there was no German exhibit. A military aristocracy, in control of Germany's most efficient educational system, had used it for their sinister purposes, with the result that Germany was then at war. There was no Chinese Empire. The Republic of China was represented by a crude and unorganized system of popular education. In the early history of China its educational system was very effective, but the whole Government eventually fell under the domination of an aristocracy of intellectual acrobats who despised everything practical. The strangle hold of this classical educational system was responsible more than any other one thing for China's prolonged backwardness. At last China has freed itself from the control of this educational monstrosity. The fact that the San Francisco exposition exhibited only subjects which had made progress since the St. Louis exposition disclosed many surprising conditions, among which was the fact that higher education and the education of the deaf and of the blind had made little progress. Both had fallen far in the rear of the primary and secondary schools. These schools had made rapid strides by experimenting, inventing, and discovering, which resulted in the application of new principles and new systems. All of which involved an expenditure of time, effort, and money. This is not a personal opinion, but a self-evident fact, certified to by the international jury of awards on education, which was composed of the foremost educators of the world. Since the war higher education has begun to adjust itself to

new conditions, so as to establish its foundation on the structures of primary and secondary education, making the growth from the bottom up with a strong directing influence from the top down.

What concerns us here to-day is to find out why we have not kept pace with the public schools and what can be done to regain our former prestige. The object of this paper is to show that the proper organization of an industrial department and its correlation with the academic work is one of many remedies. Before discussing the technical relation of these two departments it will be necessary to make a brief diagnosis of the disorders of both.

Much has been said concerning the standardization of the methods of educating the deaf. Any amateur, after making the most casual inspection, could tell that the schools for the deaf in many respects are well standardized. The primary departments are organized on the same basis. The children are all jumping, hopping, bowing, and using practically the same vocabulary. The well-organized work of the primary grades, on reaching the intermediate department, seems to go to pieces. Here, again, we find the same cut-and-dried drill. It is drill and more drill. The advanced department is made up of timber saved from the wreck of the intermediate grades. The relative importance of some of the subjects taught is questionable and the methods of teaching are often the same as were employed when you and I went to school. Some schools have no advanced grades. The more thoroughly the academic department is organized the more noticeable are many of these conditions.

Mr. Morrison, in his paper at Columbus, analyzed the defects of our industrial department. We do not always select the best trades. We try to teach too many industries, and are teaching none of them well. Instead of schools, they are shops. By maintaining them as services to the institution we exploit the pupil in order that the school may profit. The instructors are seldom trained teachers. The equipment is usually inadequate and out of date. Retaining a shoe shop after cobbling ceases to be a trade is not marking time; it is a step backward. What is the cause of these academic and industrial disorders?

Is it our teachers? Have they the proper education and training for keeping abreast with the times? Is it because so many of them are trained for primary work and the unsuccessful are shifted to the intermediate grades? Is it because they are not up to date in their methods of teaching the common branches? Is it because the intermediate teachers do not understand the psychology of the period of adolescence? Do they believe the general laws of psychology do not apply to the deaf and assume the deaf can not be brought up to the best standards? Do women teachers ever understand boy psychology?

Is it due to the pupil? Do most of them reach their mental level in the intermediate grades? For those who did not have the privilege of hearing Dr. Goddard at Columbus, I wish to reproduce one of his charts with explanations.

WAGES OF 100 WAGE EARNERS.

9 per cent earn $150 to $200.
12 per cent earn $250 to $300.
16 per cent earn $350 to $400.
31 per cent earn $450 to $600.
(68 per cent earn less than $15 per week.)
27 per cent earn $750 to $1,000.
3 per cent earn $1,250.
2 per cent earn over $1,250.

SCHOOL OF 100 CHILDREN.

13 per cent leave in fourth grade; age, 10.
13 per cent leave in fifth grade; age, 11.
14 per cent leave in sixth grade; age, 12.
27 per cent leave in seventh and eighth grades; age, 13, 14.
(67 per cent do not finish eighth.)
23 per cent leave after eighth.
10 per cent attend high school.
3 per cent graduate high school.
1½ per cent college.

INTELLIGENCE OF 1,700,000 SOLDIERS.

10 per cent in D group; mental age, 10.
15 per cent in D group; mental age, 11.
20 per cent in C group; mental age, 12.
25 per cent in C group; mental age, 13, 14.
(70 per cent are below mental age of 15.)
16½ per cent in C group; mental age, 15.
9 per cent in B; mental age, 16, 17.
4½ per cent in A; mental age, 18, 19.
(Subtract 6 years from the mental age to get the grade capacity.)

The first tabe relating to wages was prepared by the Bureau of Labor before the war. The second, relating to school children, was prepared by the Bureau of Education about the same time, and the third was prepared by the War Department. These three departments worked independently without any knowledge of what the other was doing. The Bureau of Education later published the first two, stating that the reason laborers did not earn more was because they did not stay in school longer. Dr. Goddard, in his publication, annexed the third chart, stating that the reason they did not earn more and the reason they did not stay in school longer was because they did not have the intelligence. Undoubtedly, all of you have read "Dear Mabel." The book is dedicated "to a million Bills." How old was Bill, mentally? He evidently belonged somewhere in group—C or C.- The Bureau of Public Health has published a table in which the health conditions of the people of this country correspond to the three tables given herein. Perhaps that also is a factor. Does poor health retard the development of many of our pupils?

Is the fault with our methods of instruction? Is the confusion in the intermediate grades due to the fact that our primary department is organized on a false basis? Is it because there is too much cut-and-dried drill and the subjects we are teaching need to be vitalized? Is it because the industrial departments are loosely managed and there is not the necessary correlation to produce effective results? Are our schools organized to meet conditions which are either passing or do not now exist?

Is the fault with the management? Is it because the teachers are not paid a living wage and are not able to retire with honor when they have completed their life's work and the management for sympathetic reasons finds his staff heavily loaded with dead timber? Is it because the management is too self satisfied? Instead of trying to bring to light and to remedy defects, is the management trying to conceal or excuse them? Is too much money being spent for show, in order to attract pupils, or for publicity purposes, or to counteract false propaganda?

Is the trouble with the profession? Is it because the private school, the day school, and the public boarding school have not learned the art of friendly competition? Have we been fighting and quarreling over petty technicalities until we have lost sight of the broad principles for which we should all strive? Have we kept aloof until we have begun to deteriorate? Is the young blood of the profession failing to make good? Are the young members trying to imitate the methods of their elders, instead of meeting the live problems of to-day with their own solutions?

Are any or all of these the reasons we are off the track?

The effectiveness of a system of education is dependent upon its thorough adjustment to its ever changing environment and its ability to serve the varying needs of a progressive people.

During the recent World War numerous foreign military officers visiting the country said that if they were absent from the front two months they would be entirely out of touch with the latest methods of warfare, and it would take some time for them to become acquainted with the new methods. A method is an organized plan of attack. It is a means to an end. It should be fluid. When its purpose is accomplished the method is useless. Often it is necessary to change or abandon a method on short notice. If the method becomes the end, instead of the means to the end, if it becomes set, becomes a creed which must be blindly followed, then it is a menace to progress. We are in a great war in which education and her allies are opposed to ignorance, crime, disease, and their associates. We can not afford to permanently attach ourselves to any method. A system of education has the power to change the nature of a people in one generation, making of them a nation of warriors or

of scientists. The teacher can not escape his or her responsibility when handling a proposition which has the power to make or break a nation.

The desire to live by wits, and to shun honest production, has always been a great handicap to progress. An old French philosopher once said, "There are three classes of men—thieves, beggars, and producers." The coming generation must be taught to honor those engaged in productive pursuits and to despise slackers, whether they are rich or poor. Occupational efficiency can not be attained without it is accompanied by the development of an understanding of civic responsibilities.

Whereas the industrial department must be so organized as to meet present and future requirements, it will be necessary to first thoroughly examine the general industrial situation and make a careful survey of local conditions. In examining the general industrial conditions of yesterday, to-day, and to-morrow it is noticeable that the time is passing when we can prepare our boys and girls to live at home and work with their fathers and mothers. The deaf are gathering in large numbers in our industrial centers. One factory now has 700, another about 200, and a dozen or more from fifty to a hundred each. They are drifting into the smaller factories by ones and twos. This movement is becoming general, and from all appearances will continue to increase. It makes little difference whether or not you and I approve, but it does make a difference whether or not we try to meet the educational requirements these conditions demand. Neglect on our part is criminal. If we strive as hard as the deaf, success is assured. Suppose hard times should come and the deaf would fail to hold what they have won, should the blame be placed on us?

Instead of the old-fashioned skilled artisan slowly performing his work with great care and precision, to-day 40 men are doing the same work, each one performing a certain movement or a certain part of the work. These workmen perform their duties continuously and with great speed. Not long ago a laborer applied for a position in a large factory as a skilled mechanic, and when questioned as to what he had been doing and the extent of his knowledge, it was ascertained that his only experience had been to put No. 4 nut in place. To get a good idea of conditions before the war, read the Technique of American Industry, by Charleston H. Parker, in the Atlantic Monthly of January, 1920, from which the following is quoted:

"Look at that Slovak woman," said the superintendent. She stood bending slightly forward, her dull eyes staring straight down, her elbow jerking back and forth, her hands jumping in nervous haste to keep up with the gang. These hands made one simple precise motion each second, 3 600 an hour, and all exactly the same. "She is one of the best workers we have," the superintendent was saying. We moved closer and glanced at her face. Then we saw a strange contrast. The hands were swift, precise, intelligent. The face was stolid, vague, vacant. "It took a long time to pound the idea into her head," the superintendent continued; "but when this grade of woman once absorbs an idea she holds it. She is too stupid to vary. She seems to have no other thought to distract her. She is as sure as a machine. For much of our work this woman is the kind we want. Her mind is all on the table. * * *

"An agricultural laborer from Austria-Hungary can be made a one-piece molder in three days, and in two days could be a finished core maker." * * *

"This subdivision of processes demands not only a minimum of technical knowledge, but also a passive, stolid, labor-class temperament. Against the dead, stupefying monotony of this work a virile laborer would rise."

These conditions are now changing. The most up-to-date plants are spending large sums in order to develop its man power to the utmost. They find places where those of low intelligence can put No. 4 nuts in place, but they find that men of intelligence who can perform any work in any department are much more valuable to the company. The old-time skilled mechanic who accomplished little in a day has gone. The incompetent laborer who can only perform one act is passing. The place is being filled by a man who can work as rapidly as the latter but who has sufficient skill to handle any machine in the factory, and a thorough knowledge of every feature of the business. He knows just what he is doing. It is in these up-to-date factories that our deaf are assembling. If our schools are to be effective the profession must make a thorough study of these conditions and find out what is required of the deaf and how they can best be prepared to meet the daily problems which will face them after they leave school. No system of education can long survive in a progressive country like the United States if it ignores the needs of the people it is educating.

A thorough survey of local industrial conditions can be made by consulting the industrial leaders of the city, county, and State, by discussing the problems of the school with the principals of vocational schools, schools of industrial art and institutions of technology, and by seeking the advice and suggestions of the Federal Board of Vocational Education. In addition to the above, a process of elimination may be employed to advantage in determining what industries to teach. From a list of the leading industries select those which can best be taught in school, as many of them must necessarily be taught in the factory. Again, eliminate all except those most suitable for the deaf and from these select the industries which offer the most jobs and the best opportunities. From these pick a few, a very few, which will afford the best development for the individual talents of your pupils. Procure the best and latest equipment, employ the best teachers and pay them well. Develop these industries thoroughly.

Permit me to outline the New Jersey plan of organization, which is simply an arrangement of the best practices to meet present and future requirements. The home-making industries are sewing and mending, cooking, baking, dressmaking, and millinery. The trades are printing (including hand composition, linotype work, presswork, photo-engraving), mechanical drawing, woodworking, and later, metal working. In the academic department the pupils are graduated from the grammar school, then they decide whether they will take the college preparatory course or devote a year to the completion of their trade.

Kindergarten handwork is the beginning of the correlation of the two departments. A trained kindergarten teacher from the public school has been employed to teach handwork to the beginning classes, which will be formed in two groups of about 20 each. This will relieve two trained teachers for the deaf at each period who can do special oral work with selected pupils.

Believing every child should know how to clean, press, and mend his or her clothing, a sort of sloyd class has been organized for those who are too young to go to the industries, but who are old enough to learn this art.

Free-hand drawing is the foundation for practically all industrial work. It is taught as a means of expression, as a language, and must not be confused with the old-fashioned art school. All children above the kindergarten grade take this work. The teacher accompanies her class to the drawing room and takes notes during this period, so that she will be better qualified to utilize it in her class work. The academic classes use free-hand drawing for purposes of illustration, interpretation, and appreciation.

In the industrial department, free-hand drawing is the basis of mechanical and architectural drawing, which in turn is necessary for woodworking, machine-shop practice, and designing of all kinds. Every pupil must know how to read a blue print. Free-hand drawing is also the foundation of the applied arts. It assists the printer in forming a well-balanced and artistic page. The photo-engraver requires it in all of his work and particularly with use of colors. It is of great value in embroidery, millinery, and dressmaking. Even in domestic science it can be applied in the art of decorating the table or serving the food. The value of this fundamental work must not be overlooked, but it must be taught always as a means of expression and appreciation rather than an attempt at fine art.

We expect, soon, to establish a short course in mechanical drawing and manual training for all pupils entering the industrial department. After taking this course they will be allotted to the various trades by a sort of committee on vocational guidance, composed of the principals of the academic and industrial departments and the various teachers of the boy or girl. The pupil's likes and dislikes receive due consideration and his home environment and opportunities are not overlooked. All other things being equal, the boy or girl who is good in language will be sent to the printing office and the pupil with a mathematical mind will take up mechanical drawing or woodworking. If a boy has artistic ability he will either follow mechanical drawing or photo-engraving. The quick, nervous boy or girl may learn to be a linotype operator, while the heavy, slow, cool-headed boy may make a pressman, a metal worker or a wood turner. It happens, sometimes, that a tailor in embryo is found in the repairing class. It is impossible to maintain a tailoring class for his benefit, so it is arranged with a tailor across the street to take him afternoons and Saturdays. Another boy, who does not seem to fit into any of the trades, may be sent to the baker or to the engineer. In some cases we have arranged for them to take night work at the school of industrial arts. Others work half day in downtown printing offices. These, however, are exceptional cases.

When it has been definitely determined that a pupil has reached his mental level in the academic grades, he is transferred to the industrial department. Here his entire time is devoted to the training and practice which will best qualify him for a useful life's work. A teacher is detailed to teach shop language in the industrial classes. They learn to describe what they and their companions do from time to time and acquire a knowledge of language which will enable them to intelligently interpret the instructions of a future foreman. This vitalizes the language work. Often boys and girls, who take no interest in the language lessons of the academic department, become very enthusiastic. So far, short sentences memorized and used repeatedly prove most satisfactory. Next year another teacher will be detailed to teach shop mathematics. A chemical laboratory is being equipped in order to give a brief outline in general chemistry and a preparatory course for photo-engraving. The cooking teacher will also use the laboratory from time to time, thus correlating the two departments by the teaching of science as well as art, language, and mathematics. The doctor and nurse will also have use of it. Before graduating from the industrial department the pupil, in addition to preliminary work, must take two hours a day in the industrial department for a period of at least five years and then must devote not less than one year exclusively to the trade in which he specializes. It sometimes requires a year and a half or two years for a pupil to qualify. Often graduates of the grammar school return to complete the industrial course. A night school in English is maintained for such industrial pupils.

All academic teachers not holding State certificates are required to take special courses, among which is a course in manual training. The teachers first go into the woodworking department and learn to make various articles for their own use. They soon become familiar with shop language and shop mathematics, and they carry the shop spirit back to the schoolroom. In the same manner they visit the other industrial departments—printing, dressmaking, and domestic science. It is hoped some time to have our industrial teachers visit the academic classes and to take special oral training and to learn more of psychology and the methods of teaching, so that they may more thoroughly cooperate with the academic department.

The instructor in each industrial department acts as an employment agent for the boys and girls finishing the work in his or her department. By a card-index system they keep in touch with the pupils after they leave school. Experience certificates will be issued to pupils who have successfully followed their trade for a period of three years.

It is not within the province of this paper to discuss the merits of the various industries or the methods of teaching them, but rather to give a picture of the conditions we are facing and the problems we must solve and to show that the proper organization of an industrial department and its correlation with academic work will go a long way in overcoming present difficulties. Each institution must necessarily select industries which will conform to local needs and must work out a plan of correlation to meet its particular situation.

Printing, the fifth industry of the United States, is most commonly taught in schools for the deaf, on account of the strong support it gives the academic department in teaching the use of the English language. Printing is taught both as a cultural art and as a trade. In most public schools it is taught purely as a cultural art. Hence the manual training is confined principally to hand composition. The teacher of the past generation dwelt at large upon the benefit of Latin as an aid to a better understanding of English grammar. Most teachers of to-day doubt the value of grammar as formerly taught. The method of presenting that subject has undergone a great change in recent years and it has been replaced to a large extent by English composition. Printing is to-day recognized as one of the greatest aids in teaching English and English composition.

Handwork of all kinds after once thoroughly learned becomes work. Too much handwork will interfere with the educational value of any trade. If addressing the school paper becomes such a task that it detracts from the educational value of the printing department, buy an addressing machine. Likewise, if folding the paper ceases to be of educational value, get a folding machine. Learning to operate these machines will be educational. If printing or any other industry is to be taught as a trade, much machinery should be used and the shop should, as nearly as possible, resemble a factory. The deaf are apt to slam and bang delicate machinery in a most abusive fashion unless they have been trained to handle it with great care, to treat it as a musician

does his violin, to think of it as an engineer does his engine. It is gratifying to hear some of the alumni describe the manner in which the linotype responds to their touch, how they feel its every throb and vibration, and how they control it as though it were a living part of their being. How the boss marvels at this accomplishment. If a boy or girl once learns this art they can soon master any machine with proper training. The deaf make good mechanics on account of the power of concentration developed in overcoming their handicap and on account of acute visual perception and the quickness and nimbleness of their fingers. Printing, properly taught, requires a correlation of language, art, and manual skill. This also applies to most industries, and the value to be derived from the proper application of art must not be underestimated. Much has been written along these lines and for further details I wish to call your attention to an article published in the June issue of the Industrial Arts Magazine, "Printing a fine art," by E. E. Sheldon, and to an article by Arnold Levitt, as on "Typesetting in educating the illiterate," in the American Printer of February 20, 1919.

A great portion of the life of each individual is spent in preparing for the work he or she is to do. They have a short time in which they do or do not perform their aggressive and progressive work. The balance of their time is spent in smoothing out the rough places in the work they have already done. They function by habit; they live upon their reputation. In training and practice they discover certain things which bring them success. If it were not for old age and death they would become unbalanced and block the wheels of progress. What a freak any genius would become if he could retain his youth indefinitely. The young blood of each generation must be held responsible for seeing that the systems of education are made applicable to the practical problems of their time. They must jump into the struggle and make good. The older members of the profession from a distance may see many things not noticeable to those at close range, hence the value of their advice and suggestions must not be underestimated, but if the younger generation is weak and the older generation strong, progress would be deferred. It was noticed in the beginning of this article that the public schools far surpassed the schools for the deaf in the last decade. It must not be understood by this that the schools for the deaf are behind the average public school, but it means they have lost their leadership. Twenty years ago educators of the deaf were authorities on vocational education and on the teaching of speech. The authorities of that time are references of the present. To-day educators of the deaf are not numbered among the leaders in vocational work or even the authorities on the formation of vowel sounds or the correction of defective speech. Public-school educators have come into our field and beaten us at our own game. The public schools are preparing for another great drive in the coming decade. The slogan will be "Occupational Efficiency and Civic Responsibility." The elder members of the profession did their bit in their day and whether we shall be slackers or shall assume a leadership in the coming educational crusade will depend entirely on the young men and the young women of our profession. Let us set aside our petty jealousies and forget our little differences. Let us not make a religion of any method but keep our eyes and our thoughts ever on the goal we are to gain.

Dr. ROGERS. As announced previously, this paper will be discussed by Supt. Menzemer, of the Montana school.

Mr. MENZEMER. Friends, I shall take very little of your time this afternoon, for I have had but a short time to prepare.

I am just a little bit inclined to quarrel with Supt. Pope over the statement that the public schools are getting the best of us. We take an exhibit to the State fair each year in our State, and for the last five years we have taken the prize.

Mr. Pope notes the danger of too many grades. I agree with him thoroughly. We are in danger now of having so many grades that we shall spread ourselves out too thinly and not do any one thing well. This will leave the pupil inadequately prepared for his life work; but, worse than that, perhaps, he will form habits of slovenliness very hard to break, which are formed at the formative period of his life.

In our eagerness to select the best trade for a pupil we are inclined to allow him a good deal to say concerning the choice of a trade, so that he will be sure to get the thing for which he is best fitted. This is oftentimes a mistake, I think, for no boy at the age when he should begin his shopwork knows what he will want to do later in life. So we should be careful to select the thing that is best for him, not allowing him to select what he thinks is going to be the easiest, and thereby forming the habit again of avoiding the difficult. Trades are not only essential in themselves but they often help with language.

For instance, say, a dull pupil—that is usually the way—finds something that is interesting in the shop, and if his teacher will take the pains to go to the shop and find out what he is doing, then when the boy comes to the schoolroom ask him about that casually. He will immediately want to tell her, and he will find, perhaps, that he hasn't language. Here is the finest chance in the world for that teacher to give the boy language, because he will crave it; and once you get the desire for language, the rest is comparatively easy.

Out in Montana there are two principal occupations—mining and agriculture. It is impractical for the deaf man to go to work underground, but I know of no occupation that is better suited to him than agriculture; so we are trying to teach our parents and to bring them to the point where they will let us have the boys, the older boys and girls, for the summer months. In our State the growing season is so short that the boys and girls are at home during almost the entire crop-producing period.

When we get the parents to the point where they will let us have the older boys and girls during the summer months we hope to teach the boys stock breeding and raising and farming, and the girls canning, preserving, and everything that goes to make up a thrifty housewife.

As for me, I am strong for the trades. The more we can do in this line, I believe, the better it will be, and at this period, as never before, perhaps, we need, above everything, producers. [Applause.]

Dr. ROGERS. I was just going to rule that we will have a few three-minute speeches. They will have to be very few, because we must have our minds on the program.

Mr. GARDNER. Mr. Chairman, I don't need three minutes, but I would like to say that I would hardly agree with the idea expressed here in the criticism of this paper, that we are in danger of having too many trades. The trouble with me is that I haven't got room enough to put in as many trades as I need.

In our theory of education we don't teach a trade as a trade, but as an activity. Now, suppose you have got a few boys or a few girls that need a certain kind of activity and you haven't got it in your narrow list of trades; aren't those individuals going to be the losers?

Personally I would like to provide many more activities than I have, in the hope that there would be no child who would escape all those activities without getting hit in a vital spot that would wake him up and start him going in some direction. That is the way I feel about the number of activities in our schools.

Dr. ROGERS. The Chair will be glad to hear from anyone else that has any questions to ask or who would like to discuss the subject further.

If there is no further discussion, we will pass on to the next paper, one on physical training, by Mr. Corbett T. Arnold, of the Mount Airy School, discussion by Mr. Gardner, of the New York Institution.

PHYSICAL TRAINING.

By CORBETT T. ARNOLD.

The recent physical examination of our young men of military age to determine their fitness to serve in the Great World War demonstrated in a startling manner the deep need of thorough physical training that exists right here now. In one district 84 per cent of the applicants failed to measure up to the minimum Government requirements for Army entrance. The rejections for Army entrance averaged about 60 per cent. What are we, the physical educators, upon whom the responsibility rests, going to do about it? America must wake up and create a nation of sound bodies.

Stronger emphasis is being placed upon physical training as a direct result of the incontrovertible facts secured through the Government draft. We are rousing from our sleep. Individuals, municipalities, and States are vying with each other in outlining and promoting programs of physical education. Such programs are designed to make our American manhood fit to fight not only the enemy without but the enemies within our gates—inertia, sedentary occupations, the great white plague, neurotic disorders, aversion to anything requiring a little more than the usual amount of physical energy, social evils, the exodus from farm to city in great numbers, thereby decreasing our rightful amount of fresh air and sunlight and undermining our Nation morally and economically.

Mature business men, professional men, young men, and boys are beginning to take an account of their physical, mental, social, and spiritual stock, because the spirit of this present day and age is "preparedness." The spiritual and mental is included in this inventory, because it is an almost universally accepted fact that in this twentieth century to be well equipped mentally and morally good health and strong physique are imperative.

I shall be grateful and happy if this message proves helpful to the schools and institutions represented here to-day. To us is intrusted the care and education of many boys and girls who are to be included in the very warp and woof of the Nation, regardless of the handicap many of them will carry to the "starter's mark" in the great race of life. When at the conclusion of the fourfold training program mentioned above the "clerk of the course" calls the various contestants in this race to the "starter's mark," what type of boy or girl will carry the colors of your school to the goal?

THE NEED.

You can not be too strongly urged to have instruction in physical training made a part of the regular curriculum in the schools you represent. And in the light of our present-day knowledge of these matters, it is not too radical to urge that this instruction be a required course.

Modern schools and colleges have well-organized departments of physical education under competent directors with fully equipped gymnasia, including fine natatoria, where their students receive the most healthful and beneficial of all physical exercises—swimming. So much importance is attached to this last-named exercise that many institutions of learning will not fully graduate their students until they have learned to swim.

Therefore it behooves us to be astir, realizing our responsibility to our boys and girls who all too soon will be the men and women of this great Republic and will shoulder responsibility and "carry on." Many of them will accept our standard as theirs. May we be able to measure up when asked to give an account of our stewardship in this very important matter.

Before suggesting a general aim for a safe and sane program of physical training for our schools, let us briefly examine the various gymnastic systems.

GERMAN GYMNASTICS.

Much interest was aroused through the work of Gutsmuths in the latter part of the last century. He was considered a broad-minded and scholarly teacher of gymnastics. Then early in this century a German teacher named Jahn be-

gan an active campaign for general physical training. His physical training was of a patriotic sort, designed to build up a strong nation, and in training individuals by his methods he recognized a great means to this end. The exercises and the apparatus used were mostly of the spontaneous type—climbing, throwing, running, wrestling, and jumping—all strenuously practiced.

Then came the pieces of apparatus known as the horse, parallel bars, and the horizontal bar. There was no special physiological study of the effects of these exercises on the individual, hence unwise use of same brought about a condition not to be desired to-day. The shoulders of the pupil were pulled forward because of the overdevelopment of the pectoral muscles; his chest was not large as far as actual lung capacity was concerned, but it had knotty masses of muscle upon it. To-day we seek lung capacity, agility, speed, and a storing up of reserve force. The type just referred to in Jahn's system was rather heavy in his running and walking and could not measure up in a speedy endurance test and remain comfortable. But the German Turnvereins have been more successful than any other organization except the Young Men's Christian Associations in building and maintaining institutions for the purpose of popularizing and promoting consistent physical education programs.

The German system did not give opportunity for the type of sport which the Anglo-Saxon enjoys. And while the Teuton's exercise has been mostly individualistic, the American boy and the English boy sought good exercise and sport in mass games and keen competition, developing initiative, endurance, and the qualities of good sportsmanship.

THE ENGLISH TYPE OF EXERCISE.

We find that the English lads do not place must stress on exercise for the sake of the exercise, but for the love of the sport itself. In England one does not hear the name "gymnastics" as much as in Germany, Sweden, and America. The term "athletics" is used a great deal.

The boys in England make good use of their spare time in athletic games, such as cricket, rugby, tennis, running, walking, jumping, rowing, horseback riding, etc. These exercises are better than the more artificial exercises we find in gymnastic societies. The exercises listed will give one a more symmetrical development and are more to be desired in every way. Here we find recreation which re-creates. Who would not choose rowing on a river or mountain lake in preference to hard and rather dull work on a boom in a gymnasium? And who among us would not prefer to have a pleasant and exhilarating ride through the hills on a spirited horse than to work ourselves into profuse perspiration on an inanimate "German horse" in a poorly ventilated gymnasium?

You will readily see a contrast between the English athlete and the German gymnast. The Englishman is quite strong, erect, and rather graceful. A dyed-in-the-wool German gymnast, or anyone, in fact, who persists for any length of time in the type of exercise of which he is an ardent exponent, will develop very powerful shoulders and arms. Knotty muscles will stand out prominently; the chest will appear large, yet it very likely will lack lung capacity and will not respond in a test of speed in a game or in a long run. Such a one is not usually graceful as a jumper, walker, or runner; not very much interested in athletics. He regards football as brutal—can you imagine such a thing? Possibly the World War has taught him what athletics can do for a soldier, and football in particular.

To conclude a summing up of these two types, it will be seen that the difference between athletics and gymnastics is that fundamentaly in athletics the results sought are really objective; whereas in the German type of exercise stress is laid on the form in which the exercise is executed. The German type is subjective.

OTHER TYPES.

Dr. Dudley A. Sargent, of Harvard, has given a most original contribution to physical training. He took undeveloped machines, improved on them, and created a variety of exercises in connection with them which, if followed out intelligently and persistently, developed most all of the muscular groups of the human body. Yet in these cases the man merely developed great power in individual muscular groups instead of being able to use such strength for long periods in running, swimming, wrestling, boxing, etc., which demanded both speed and peculiar skill. Yet we must not lose sight of the fact that Dr. Sargent earnestly advocates other forms of exercise to secure the best all-round results.

Another system was that known as the Delsarte system, a most unsatisfactory one to discuss. Delsarte was a Parisian whose aim, naturally, was to train one to be able to express by means of the human body emotion and thought. It was in a truer sense a school of expression rather than physical training.

PHYSICAL TRAINING.

One more before exhausting this list. I refer to a so-called school of society gymnastics, which taught the individual how to go upstairs, how to carry the arms and hands, how to sit, how to stand, and how to carry the head and neck in an approved style. It will readily be seen that this can not be classed as a genuine system of physical training.

SWEDISH GYMNASTICS.

In this system we find three essentials: First, the day's order, a physiologic sequence among the exercises carried on each day; second, gymnastic progression, a sequence of the movements day by day; third, the various movements must always be made to word of command. The originator intended that his educational type of gymnastics should form a complete system of physical education and should bring all of the muscular groups or bodily powers to vigorous, healthy maturity.

Present-day directors of physical training do not agree with Ling about this, for he, they think, did not lay sufficient emphasis upon endurance; that capacity of heart and lungs which, we have come to realize, is of great importance. Nor does his system give that attractive and wholesome type of hygienic and recreative exercise which the modern lad takes to as a "darkey takes to watermelon and chicken." The fundamental object in his system is a corrective one and to offset "school-desk evils." For the adolescent organism it is to be commended. A moderate amount of this corrective work, combined with the play type or recreative exercise, you will find to be a happy combination. This is necessary because true Swedish gymnastics are not recreative in their character and therefore can not take the place of play, which the modern youth demands and upon which he most surely thrives.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

We shall conclude our perusal of the various systems of gymnastics and physical training with a glance at the type of work fostered by this world-wide organization. It is the type of work from which the writer has gained most profitable results and he respectfully recommends it to you without hesitation for the boys in your schools. You will likewise obtain excellent results in physical training for your girls by emulating the type of exercises fostered by the Young Women's Christian Associations. Having been connected with the former organization in an official capacity for some time past, I am able to write with more authority and in detail about physical training for boys. Therefore most of my thoughts will be expressed with them in mind.

With the possible exception of "heavy apparatus" work, short hard strains, and endurance tests, much of the same type of exercise can be profitably carried on for both the boys and girls. Corrective work, recreative games, and gymnastic or folk dancing form a pleasant and profitable combination for the girls. The apparatus for both boys and girls should be used largely as obstacles to get over or around quickly, rather than to maintain sustained positions upon.

A SAFE AND SANE SYSTEM OF PHYSICAL TRAINING.

(*a*) The period of exercise usually begins and ends either with work for the smaller groups of muscles or with gradual work for the larger groups and sometimes both are on the programs. In such a program those very important vital organs, the heart and lungs, are gradually led up to and protected against severe efforts, thus safeguarding the human mechanism. Many times when the maximum of effort is at the end there comes a run, a tug of war, or a fast game, followed, as this should be in every case, by a graded bath, a plunge into a swimming pool if possible, and a brisk rub down with a Turkish towel until the body is aglow with an energized circulation.

(*b*) Our aim should be to exercise each part of the body in general accord with its natural functions, referring to the quantity as well as to the character

of the exercise. With growing boys and girls the arms should not be allowed to maintain sustained positions on the horse, parallel bars, horizontal bar, and the like. In short, we should give a minimum of "heavy apparatus" work.

(*c*) The exercises should be graded according to the particular class we are handling at the time and each individual muscular effort should be well within the limit of the pupil.

(*d*) Such a program may include a large number of individual exercises; thus the sum of the points earned may be considerable and the mediocre pupil greatly encouraged. A point system has many advantages. No matter how poor the record made, many such repeated efforts soon total a gratifying number of points and you have converted your otherwise shy and backward pupil into an enthusiast.

(*e*) We must have our plan of exercise correspond to the physical needs and the stage of development of the pupil. Great care should be exercised here. Let us not give the adolescent child the same type or amount of exercise an adult can take with a degree of comfort and enjoyment. Our competitive games should be likewise intelligently and carefully planned. Starting in with our primary pupils, we should work on up through the intermediate grades into the advanced department. Even in these three grades we may find it a wise plan to grade the work again, for we shall see that what may be "meat for one may be poison for another." In all of these grades we can very well place great emphasis upon the position of the trunk with reference to the effects of the exercise upon the viscera contained therein.

(*f*) The amount of close attention, concentration, and memory work is minimized with hearing boys and girls. With our deaf children, of course, we need very close attention in the case of corrective exercises and marching. We can get away from this to a great extent in mat exercises, tumbling, and some games. Our work should carry us toward athletics rather than heavy gymnastics as mentioned in the German type of exercise in a preceding paragraph. Keeping in mind that old adage "All work and no play makes Jack a dull boy," let us emphasize the play type of exercise, using the numerous recreative and hygienic games at our command. Let us use our apparatus more and more as obstacles to get over and around quickly, thus avoiding sustained positions in which the body of the boy or girl is supported by the arms.

DANCING IN CONNECTION WITH PHYSICAL TRAINING.

Much could be written about dancing, but I shall spare you and use only a brief paragraph or chapter, if I may call it such. I shall refrain from enlarging upon its abuses and recognize its uses.

From the very earliest times dancing has been an important factor in the physical life of the human being, and under proper conditions it is an excellent exercise from a physiological standpoint. We can not deny the fact that dancing is an aid in gaining good posture and grace of movement. This is especially needed with our deaf boys and girls. Emphasis may well be laid on these two features in our folk and gymnastic dancing.

The more rhythmical our calisthenics and gymnastics become the greater will be the benefits derived by our pupils. The idea underlying many systems of healing which have come into vogue is that "when a man's entire self—mind, soul, and body—are working in harmony, then he is healthy, and only then." So in the physical-training program for our boys and girls we should not seek to train the body alone, but train the whole individual to respond to the will and emotions.

This type of exercise has been included in our programs at this school with beneficial results. There has been less tendency to shuffle across the school room, better muscular coordination has been attained, and better posture developed by many of our pupils who have been given this exercise. It was also found that the dancing became increasingly interesting to them. Social dancing has not been attempted or encouraged in connection with our physical-training programs.

SWIMMING AND BATHING.

A paper on physical training would not be complete unless the subject included a chapter on swimming and bathing. No physical department is considered complete unless proper provision has been made for a swimming pool and shower baths. Practically all new high and preparatory school build-

ings in course of construction or planned have made ample provision for natatoria and shower baths. Many schools Y. M. C. A., and colleges have long been equipped with them. Municipalities all over the country have come to a knowledge of the worth of swimming pools and shower baths and have included the same as an important and very necessary factor in their programs of hygiene and sanitation for their cities.

Were I to dwell at length on this subject it would be assuming ignorance upon your part of this very important phase of a live and up-to-date physical-training program. Such is not the case, and I am sure that within this body assembled here to-day there are superintendents, principals, members of boards, teachers, directors of physical training, and friends of our schools who are even now seriously planning to place at the disposal of their pupils, teachers, and officers at the very earliest opportunity modern natatoria and shower baths. Some already have shower baths, but these are not enough.

By having modern swimming pools connected with our gymnasia we could add another very important feature to our programs. Swimming as a healthful, pleasant, and symmetrical developing exercise has no equal. Let us not lose sight of the fact that during the past few years an average of one person an hour every hour of the day drowned in this country. In almost every case it was the result of not knowing how to swim on the part of the person drowned, and in many cases needless loss of life was the result, because those near at hand were not sufficiently "at home" in the water to save life.

I most earnestly urge every member, teacher, officer, and director of all schools everywhere to keep the possibility of a swimming pool uppermost in mind and plan seriously and intelligently to place one in his equipment at the very earliest date. Then we shall have added not only the means of having the finest and most hygienic exercise, but we shall have added to our equipment a decidedly humane feature which has a very strong appeal, that of making every pupil a swimmer and every swimmer a life-saver.

LEADERSHIP AND IDEALS.

In all of our gymnasium classes and among our athletic teams from the youngest to the oldest we should endeavor to develop leadership. We should be ever on the alert to aid and assist that boy or girl who shows initiative and lead them on to the point where they may become dependable enough to assume responsibility. They can then assist us in handling larger groups. By this means our programs may be greatly enlarged and more pupils receive the benefit of training. It was Mr. Dwight L. Moody, I believe, who gave us a good thought along the lines of leadership. He said, "It is much better to be able to get 10 people at work than to be able to do 10 people's work." Let us be on the lookout constantly for the "key" boy in our groups and give him a job. Do not give a boy too easy a task. A real boy enjoys a hard task and he will try to measure up to it. The more individual initiative we develop through our work, the better fitted our pupils will be for the responsibilities they must eventually assume.

It is decidedly better to emphasize mass play and exercise than to cater to the individual or the few who desire to "star" in one sport. Let us foster the all-around type of athlete. He is more to be desired than a "specialist." Let "good sportsmanship" be our daily sermon. It is ample reward for us to see our pupils, through our program of sports, develop moral cleanness, mental alertness, and physical efficiency. Victories are desirable in our competitive games if they can be won without lowering our standards. Let us keep before our pupils the standard of the Apostle Paul, who was often an interested spectator at the gladiatorial contests of ancient Greece, who drew from them many attractive illustrations which he used very profitably in his work with individuals and groups. He remarked to Timothy, "And if a man also strive for masteries, yet is he not crowned, except he strive lawfully." To paraphrase an old proverb, "A good name for our school should be chosen rather than great victories."

FACTORS TO BE CONSIDERED FOR ACHIEVEMENT.

Physical department equipment, time, and vision are three very important factors to be considered if we are to achieve worth-while results in our departments of physical training.

EQUIPMENT.

The modern workman uses modern tools. The day and age in which we live demand efficiency. To have our departments function properly, thoroughly modern equipment must be provided. Superintendents, principals, and members of board of managers, your directors of physical training are very keen about keeping abreast of the times. Business men will not tolerate antiquated equipment or methods in their business. Neither should they tolerate these things in the various institutions they represent. Their stewardship should be just as exacting here. The question should not always be raised, "Just how much can we afford?" or "Can we not do without a swimming pool or a new gymnasium a while longer?" Such methods if persisted in will tend to dishearten your most enthusiastic directors and must eventually bring about inferior programs. The question should be squarely faced, "Just what are our needs to place us on a par with other schools in our departments of physical training?" Can we fail our boys by neglecting to modernize thoroughly this vastly important department of their work? Do we value our dollars more than the body and soul of a boy? God forbid.

TIME.

How we do crowd the very best hours of the day with a hundred and one things and then if an hour can be spared here and there, devote it to physical education. In these few hours we must organize and carry through to satisfactory completion gymnasium classes for all grades, giving corrective, hygienic, and recreative exercise, not forgetting the special attention which should be devoted to abnormal children. Then, there are our representative teams in all sports, especially among our boys, who need this incentive and thrive in a most healthful manner because of the keen competition these sports give them in their contact with representative teams of hearing boys from first-class high and preparatory schools.

If we are to experience still better results in the schoolroom and shop with our boys, sufficient time must be given them for their games. This has long been conceded by the majority of schools in our country and in some foreign countries. This training is started at a very early period and carried on through to the very close of their student life. "Rome was not built in a day." Neither are first-class football, baseball, basket ball, and track teams built in a day. Long periods of hard and very patient work are required to secure satisfactory results with these teams, especially in the case of our deaf boys. Yes; time is a most important consideration in this work. Because of a lack of time allotted this work, physical examinations often become very perfunctory. Trying to crowd too much into the gymnasium period, the work becomes "physical torture" rather than "physical culture" to the pupils, and the same may be said of the short periods allowed for the practice and playing of competitive games. Our boys will soon realize their limitations and chafe under them. Quite often the little outbreaks of "bolshevism" among our boys is an offspring of this very thing.

THE VISION.

In closing, may I ask "What is to be our vision?" Is it to be a self-satisfied plodding along in the lowlands or a constant genuine effort at reaching outward and upward to the heights? The vision must precede the task and the performance. This is proved true when we recall history. An illustration may the better enable you to carry away with you just what I have in mind:

John Muir, famous in matters of natural history and exploration, while traveling in Alaska in the region of that great glacier which has since been named after him, contracted a cold which settled in his bronchial tubes. An irritating and very annoying cough was the result. Muir when writing of this experience some time after said that the lowland germs had got into his system and had begun to handicap him in his effort. He diagnosed his own case and prescribed the remedy. What we needed, he said, was to get up into a much higher altitude, where, in the atmosphere of clear, pure air, the lowland germs could not live. The result of this prescription, followed out, was not only a victory over the bronchial trouble but a successful climb to the heights of a wonderful glacial formation, an achievement that crowned him with honor and health.

Shall we in our departments of physical training plod along in the lowlands and become infected with the germs of selfish materialism, antiquated methods and equipment, lack of time and vision, with a resulting irritation and annoying knowledge of our limitations? Or are we going to climb up into the higher altitudes of modernism and efficiency, where in the atmosphere of clear thinking, modern methods and equipment, planning our work and working our plans, we shall achieve results well worth while and exclaim with John Muir, "I knew those lowland germs could not live up here!"

Dr. ROGERS. We will now hear from Mr. Gardner, of the New York institution.

Mr. GARDNER. Mr. Chairman, members of the conference, and friends, since I have been in Mount Airy this time for the past four days I have received a number of new impressions, and I have confirmed a few that I had before I came this time. One of the new ones I have received is that it is growing customary or fashionable to discuss a formal paper by reading another paper a little more formal and of greater length. I am sorry I can not keep up with this style, so I will just say a few words to illustrate, if I can, a change that has come about in the work of physical education in the last few years.

The ideal of the man at the head of the Mount Airy School has not changed, but his processes have changed. I can remember when Dr. Crouter had a system of physical exercises which were entirely different from those described by this young man this afternoon, and it is not many years ago that Mr. Arnold would not have been allowed to stand on any platform in this country and read that paper. Here in Mount Airy—one of the impressions that I have confirmed—I see a man in the midst of a large group directing its activities with the vision that this young man expressed in his peroration, shall I say? And I see in his work the ideal that corresponds to what I have seen on many sides of Wissinoming Hall. This young man expressed his own ideas in his own way, but he expressed Dr. Crouter's ideal to a given extent or he would not have been here to read that paper, and that is the important thing.

There can be no result without a process. Processes change, for the reason that results are unsatisfactory, but it is not necessary that the ideal should change, and Dr. Crouter's ideal has not changed; he had just as clear a vision of what he wanted in the days when he had a different system of physical education here in this institution as he has to-day, but he much more nearly approaches the realization of his vision and ideals to-day than he ever has before, and I am sure he is better satisfied that he is promoting conditions of helpfulness, mental and physical, moral and material, in the group of children with which he is surrounded to-day than he was in the days when he had a system that required certain things to be done in a certain way, in a given time, and for the purpose of building a set of muscles. Mr. Arnold has mentioned those systems in his paper.

The product aimed at in the first system that was introduced here, the first real hard-and-fast system, was the standardization of the size and texture of the biceps. Dr. Crouter, among others, found that that was not the result he was looking for, and did not find in that system the result that he was looking for, and a change was made in systems. I am simply speaking of this institution, what has transpired here, as typical of what has transpired throughout the country.

The next system was based upon a different theory. "We must have more than a set of knotty muscles; we must have a symmetrical boy and a symmetrical girl." And we got them, but they did not meet the ideals of men like Dr. Crouter throughout this country; the results did not measure up to what was wanted, and we looked about to find the reason why. We found that the thing that was lacking was coordination; in other words, the educational values of exercise were absent; there was no exhiliaration on the part of the child. That was the first indication that something was still wrong. Perhaps the worst idea that a child can carry into a gymnasium or into a sport, or into anything in the line of physical exercise, is the idea that he is going there only to play, and yet the spirit of play is the underlying impetus of all that is to be brought out through our present system. It takes a man of training and of judgment and of some vision of his own to bring this about and not get tangled up with the natural instincts of the child in a large group He can handle one easily enough, but he can't get results without a group, and a large group will run over him unless he knows exactly what he is aiming at and insists upon getting it.

We are coming closer now than ever before to realizing the thing that we most want to develop in our children, especially in our deaf children, and that is firmness of mind, together with soundness of body. When we get those two conditions—and the things that are needed to get them are precisely those things that have been described here in Mr. Arnold's paper, and which would have been looked upon with holy horror only a few years ago—we are bringing into existence those attributes which are most sought in our present system of physical education.

There is one feature of physical training that Mr. Arnold left out of his paper—I don't know whether he left it to me intentionally or not, or whether he just overlooked it or whether he thought his paper was long enough without it, or perhaps he thought, like so many do, so many of his profession, I mean, that it is in opposition. That is the military feature. The workers among the deaf—I speak of them, because I come in contact with them as I do not with the others—the workers in your field, Mr. Arnold—are very prone to think that the military is trying to crowd out the gymnasium and the athletic. Now, when I say "military" to you I wonder how many of you have a vision of parades and maneuvers and guns going off and all that sort of thing. Just recently we have had experiences that make the word "military" mean more to us than that, but few of you, unless you are familiar with the possibilities of the military feature in a school for the deaf as an educational factor, will have the right idea. The military in the Fanwood school is a part of the physical education system, a part of the system. It is educational; so is your work, Mr. Arnold; if it were not you would not be here.

In the Army we say "military" and we have a vision of a grown man being transformed into a fighting unit, body, mind, and spirit, but that is not so in the school; military doesn't mean that in the school.

Just before I came in here I sat down under a tree thinking of that feature of it and jotted down a few of the values, the direct—only the direct values of the military teacher and which the military

teacher brings into action or brings out through action, those qualities which you teachers in your classrooms strive so hard to get by indirection and find it so difficult. Whenever you find a thing that is so difficult for the child in your class to comprehend or to take into himself and make a part of himself and realize that it is for his benefit that you are trying to teach him this new idea, if you can then find some means of passing that idea over into action and of putting the boy and the action together, you will come as near as possible to making him realize the benefits to himself of what you are trying to teach him.

Now, I have enumerated here a few of those direct results that come from the military, as used in an educational system.

We will say, first, self-confidence. A boy in military formation has got to believe in himself and in his ability to do what the other fellows are doing on both sides of him, or he knows that he can't get along, and a little daily practice of that brings self-confidence. A criticism on the military has been, "Oh, but the time it takes." It takes about 25 minutes a day for four months in the year to bring about and to maintain in Fernwood a military organization that when it comes in competition with all the high schools and military preparatory schools in the State of New York invariably carries home the highest award. That is not much time, and it is not lost time. I don't know of any hour in the day that is spent by a boy during the open season when we go out and have those exercises that is of more value to him than the 25 minutes that he uses in the morning before school in that military training.

Add to self-confidence self-control, self-discipline. Included in that there is implied a cleanliness in body and in mind that comes with a little daily exercise and what is entailed in a military organization for school purposes. He must look like the fellows that keep themselves best; he must keep his clothing in that way; he must be in order; he must not, for that time anyway, have his cap slouching on the back of his head; he must pay attention for a few minutes each day to those things that straighten him up and make him a manly looking youth. That is not lost time even if that was all it got—just a few minutes each day to make the boy tone himself up and look like and try to feel like the best-looking fellow in the ranks. That is what they do.

Then, too, he has got to have a fairly clean mind to hold his own in that rank. I won't attempt to tell you why here, but you can see that, if you give it a minute's thought. The boy, the girl, the man, or the woman who has not a fairly clean mind knows well why failure results in other things as well as in a military alignment. This leads directly to the question of personal hygiene, and there is, in my opinion, no feature of any school that will do so much for children in the matter of personal hygiene as a military organization.

There is also a wholesome respect for the rights of others. A good deal of time is spent in the classroom trying to get that; it comes quicker, easier, in the military organization. There develops also a steadiness of bearing, a directness of approach, a brevity of expression, that, as the months and years go by and the little fellow grows up, will show itself most plainly in the individual walking down the street, going upstairs, passing from one room to another.

He carries himself that way habitually; he has grown up in that way. Why shouldn't he? He doesn't know any other way. That is the easiest way for him because he is attuned to that motion and that attitude. Then there is the value of concentration when we have an alignment of our organization formed in three or four companies; the band is there, the flag is there, the institution colors are there; and there is an exhilaration in every one of those fellows, and he is going to do his part to meet the requirements of the whole unit, every single one of them, during the maneuvers, whatever they may be, or in marching. That is not a bad impression to make on a boy.

Another thing about the value of concentration comes through the exercise of attention. You have pretty nearly got to get attention to get anything beyond that, and with the deaf boy in military formation, the command about to be given—you get the same thing in your work, although it is not military—you have got 100 per cent attention or zero, because he gets it through the eye only. The eye is rapid; the ear is slow, uncertain, and the consequence is that when our boys come into competition with military organizations in schools for the hearing they never fail to take away the prize. Why? One hundred per cent attention upon the command and the execution. [Applause.]

Then there is again the question of good manners. The question of good manners is a large question. There are certain things that are not taught in the line of good manners in a military organization, but the foundation out of which good manners grow and alongside of which they must be placed in the character development of every child rests more visibly, more actually, in the movements of a military organization than in any other activity that I know of.

There are many other things—obedience, promptness, punctuality—but I have just tried to mention a few of the most direct benefits and a few of the most important. Is all that in opposition to your effort, Mr. Arnold? I don't think so; I think it is all one thing.

Now, because the boy has a uniform on is no reason to assume that he is under military restraint; none whatever. Only for a short period each day in the open season is he under military restraint, but as the days go on the idea of restraint passes off from him and there comes in the place of it a sense of pleasure and fitness to do something that is going to be applauded by those who see it done. That is worth something.

You may think, Mr. Arnold, I am not discussing your paper; but there is nothing to say about your paper except that it is all right. [Applause.]

Dr. ROGERS. Now, don't everybody leave. The best is yet to come. Does anyone wish to add any further questions before we pass on to the next subject?

Mr. Litt asks the question whether it is well to encourage interschool contests, or simply contests between the pupils of the same school. How far would you go in that? Is there anyone here who can answer that question? I think that he means to say not only between schools for the deaf but between other schools for the hearing.

Mr. BOOTH. Encourage contests of all kinds with outside schools. Have all the contests you can.

Mr. PITTINGER, of Indiana. If I had any one criticism on this excellent program it would be it was too long, yet I should like to have just a minute. I want to commend the excellent paper, not less for the caution that is expressed than for the excellent program which is outlined.

After hearing a very eminent scientist speak about the dangers to the adolescent boy and girl of overphysical exercise, and after observing boys and girls in athletic contests and games, I am fully convinced that no small per cent of the weaker boys and girls are injured by the athletic games and contests more than they are benefited. I think we do not realize how very fatigued some of them get, and how dangerous it is to their hearts and their lung development.

Speaking from my personal experience, I placed my own little girl under a trained physical director. She came home one evening—and she is a healthy, normal, vigorous child—completely wilted and worn out, and, in spite of everything we could do, in a few days she had pneumonia and we had a real fight.

I think there is a great danger to growing boys and girls in these days when we are placing the emphasis on winning. There is a great danger of overdoing their physical strength.

Dr. ROGERS. Is there anyone else who wishes to make any remarks? If not, we will pass on to the next paper on our program. I see we have caught up about 15 minutes, so we will have plenty of time. This paper was written by Supt. J. W. Blattner, of the Oklahoma school, who found it impossible to be here on this occasion, and I have asked Supt. Driggs to read this paper for us. It will be discussed by Supt. E. Emery Bray, of the Wisconsin school. This paper is on vocational training.

VOCATIONAL EDUCATION.

By J. W. BLATTNER.

This subject was not of my choosing. If the matter of choice had been left to me, I should have selected something easy or preferably left the job to one better qualified by study and actual working experience to handle it. The committee drafted me, following the methods of the war. Under the circumstances one is prompted to say that in these piping times of peace the draft is becoming unpopular. I have three objections to the rôle assigned me. The first is my incapacity, which is self-evident; that is, it is evident to myself. If it had been as evident to the committee I should have escaped the draft. The second objection is that I have not the time to do justice to so large a subject. In Oklahoma we have an 8-hour law, but circumstances compel the superintendent of its school for the deaf frequently to observe that well-meaning law in the breach as applied to himself, however strictly he may be held to accountability in his application of the law to others. This claim may elicit a smile from some of you, as in the case of the former head of a certain school. The gentleman had rather ostentatiously adopted as a rule of action, "Pupils first, employees next, and superintendents last." Another superintendent waggishly asked whether that had reference to getting up in the morning. The third objection is that this subject has been so thoroughly handled by able papers and discussions in previous conventions and conferences that there is little new to be said. I am reminded of a story told of Mark Twain. He had received an advertisement from some bottling concern setting forth remarkable properties of their mineral water. He addressed a postal card to the company upon which he enumerated the many ailments that it was claimed the water would cure, and wound up by saying, "Them's my symptoms, please send me a

barrel of your water." I am inclined to refer the members of this convention to the many papers and discussions upon this subject, setting forth the ailments of our system of industrial education and the remedies therefor, and stop by saying, "Them's my sentiments."

But really, after all the discussions indulged in and the remedies offered since the elder pedagogues of our profession listened to that splendid paper read by the lamented Dr. Warring Wilkinson at the California convention down to this good day the patient still shows some of the ancient symptoms, and there must be further testing and talk and effort at finding a cure-all. But the committee has made a grievous blunder in their selection of a doctor, for I have not a panacea to offer, and my auditors will soon discover this fact. What I shall say will be largely theoretical, as Oklahoma is yet a new State, and while she is a giant in her potential wealth, enterprise, and intelligence, and is taking an advanced position in all things educational, her young school for the deaf is not equipped like some of those in the older States. Many of the problems that have found solution in the older schools have yet to be solved at Sulphur. Some of my theories have, therefore, not been put into practice, and it may be that when it comes to a showdown the powers that be will adjudge them visionary and taboo them. The subject assigned me is broad enough for a fellow to wander around in interminably and get hopelessly lost. It reaches back into fundamentals and forward to the finished product—a young man or woman with powers developed and specialized knowledge mastered, prepared to take his or her place efficiently in the activities of a work-a-day world. It covers policies, methods, and occupations. What phase of it shall we tackle? Shall we wander aimlessly over the large field of vocational education, browsing here and there as we go on?

We might boldly strike forward into the question, What object is to be attained by the industrial education of our pupils? Should it be to turn them out with a reasonable mastery of some trade, prepared to enter the industrial world at once as workman in competition with other workmen and win a place and a competence? That was for long years the object of our schools, and while many of those that were turned out fell by the wayside, many others made good. This was done with poor equipment and often with mediocre teaching, without a systematic course or coordination with the literary department of our schools. They were turned out with meager knowledge of the terminology of their trade, not knowing the names of many of the tools which they handled so deftly or able to give an intelligent description in English of the various manipulations of tools or operations performed in the pursuit of their trade. There were even so-called instructors whose vocabulary did not enable them to teach their pupils these things. That was the day of small salaries and primitive teaching, but notwithstanding these handicaps, our boys, bright, alert, quick to catch on and ambitious, went forth in large numbers and won out in the race to gain a livelihood. Now, this is not said for the purpose of glorifying the crudities of the past or the more glaring and inexcusable crudities of the present day of advanced thought in the field of industrial education, but to point with the pride of anticipation to the brilliant possibilities, with the latent and undeveloped talent at our disposal, when our shops are properly equipped with modern tools, appliances, and machinery, and intelligent, efficient methods are pursued. It is well, however, to take a retrospect view, and determine whether we can not learn something from the past, crude as it is, and take a measure of the progress made in recent years toward a higher standard of methods and a more finished product.

We boast of having been the pioneers in industrial education, but when compared with results attained in recent years by schools for the hearing can we say that we are maintaining the lead? It is within the memory of some in our profession when the general educational world first began to turn its thoughts in a large and earnest way toward this important question of industrial education. If we will only emerge for a short while from the little world in which we move with smirking selfsatisfaction and take a peep into the wider educational world without we shall be surprised, perhaps astounded, at the strides these outsiders have taken. The cause is not far to seek. They began by carrying the scientific methods of the schoolroom into the shops. Their industrial teachers were men and women of culture, thinkers who started with fundamental principles, planned systematic courses, developing grade by grade, and coordinated them with the literary courses. They went further and made these courses a part of the school curriculum, allowing credits for work done in them, such credits to count toward the attainment of diplomas. Few of our

schools have traveled any distance along the line of this policy. Most of us carry on this important work of industrial education in a hit-or-miss way, as a separate and distinct proposition, dovetailing it very little with the literary work, giving no credits that in a composite scheme of education shall count toward the attainment of a diploma, and with all, if we have courses, they are a sort of hop-skip-and-jump affair, devised for the sake of convenience to suit the occasion, with little regard to gradual and orderly development upon scientific principles. A few of our superintendents, feeling that things were out of joint, have added to their other burdens that of preparing courses for their shops, but superintendents, as a rule, are little better qualified to undertake such a job in detail than the ordinary railway president is to lay out and direct the varied and complicated work in a locomotive or car shop.

What shall be our policy in the matter of industrial education? Shall we adopt the scheme of manual training as pursued for a long time in the public schools of the country—that is, teach certain underlying principles applying to various phases of handicraft and afford our pupils the manual dexterity and the handling of tools required in a number of occupations, letting them select their trades later? Such has been the doctrine preached in scholarly papers read before this convention of late years. I do not advocate such a policy. In their earlier years our pupils have not the mental development to grasp the principles of a course in manual training, and in their later school days they should devote what time they have to the mastering of a trade. Their time is all too limited to do justice to the learning of a trade which is to be their life occupation and by which they are to make a living. What matters it if a prospective shoemaker does not learn to handle a saw, a plane, or a square and can not make and name the various joints in carpentry or tell where they are employed? It is essential that he knows how to half-sole a pair of shoes substantially, how to put on a patch neatly, how to cut out material and put it together in a creditable finished product. It is important that he learn to do this work with speed and accuracy. In this day of the division of labor the exacting industrial demands are for men and women who can do one thing well. I do not mean that our industrial teaching should be so narrowed as to confine our students to individual lines of piecework. A trade should be taught as broadly as conditions will permit, because when that is done our graduates can take their place anywhere up and down the line where division of labor is the rule and do efficient work; besides, if they have the intelligence and the proper stuff in them they can aspire to the position of foreman and attain it. But we should confine ourselves to teaching one trade to a student and not the fundamentals of several.

There has been a gradual change of late years in the general scheme of industrial education as pursued in the public schools of the country. In the early years the courses comprised the so-called manual-training features. But it was found that students were turned out with a general smattering of many things and a mastery of none. What they had indifferently learned led in no particular direction. The result was indecision and a lack of efficiency. From a policy whose aim was largely cultural and incidentally vocational the drift has been steadily toward making the vocational the main feature of the industrial course. There is still a great lack of uniformity. In some schools that have traveled the most rapidly along the line of this evolution the scheme is largely vocational, with the prevocational and the cultural as secondary features. In other schools the latter are still the main features. The drift, however, is gradually but surely toward making the vocational the predominant feature. This, in our practical and utilitarian age, is as it should be, and I for one am not in favor of our schools adopting a policy that has been tried by the public schools, found wanting, and is being discarded by them. At all events, trades teaching if properly carried on is inevitably more or less cultural. I am reminded of a remark once made to me by the late Dr. Anagnos of the Perkins School for the Blind that, to be able to drive a cab or a car through the narrow streets of Boston and dodge all other vehicles of similar character that come flashing by, was a liberal education in itself. That is rather a broad statement, but it illustrates what I mean.

What occupations should our schools teach? This question naturally suggests itself in every discussion of the subject, and it seems to puzzle some of the patriarchs in the profession as well as the younger heads. But it ought not to be so difficult of solution if only the attendant conditions are studied and observed. In the adoption of trades at least two rules should be observed. The first is the selection of such trades as our graduates can follow in the

communities to which they return. Work can be found anywhere in printing, shoemaking, tailoring, carpentry, and cabinetmaking, baking, cooking, dressmaking, and millinery. There has been some question about farming, truck gardening, and horticulture. These occupations can be taught in schools where the pupilage is largely rural and where the seasons are long enough to permit of considerable practice and observation of results before the close of school. There would be practice in the preparation of the ground, the adaptation and the planting of seed, and even the cultivation and the gathering of some of the crops. The same rule would apply to landscaping, floriculture, and dairying. I favor the teaching of some of these outdoor occupations in Oklahoma but would hardly recommend them for a school, for instance, like the one presided over by Dr. Harris Taylor. Mere book teaching of agriculture is sometimes resorted to. With our pupils this kind of teaching would be a waste of time. More than any other children they must learn to do by doing. To teach farming, gardening, and fruit culture without proper facilities for demonstration and practice would be like teaching physics or chemistry without a laboratory. A few of our schools have abandoned shoemaking, but the reason for such a step does not occur to me. Any boy of intelligence and fair business ability can set up a shop at small expense after learning his trade and make a good living at it. The demand for good shoemakers is so great that some of our schools find it difficult to retain their instructors. Our instructor worked in a shop last summer and made $50 a week. He was offered a job in the same shop this summer at like wages. We may lose him.

The other rule to be observed is the selection of such trades as will find plenty of material at hand to work upon. Such occupations are printing, shoemaking, tailoring, baking, cooking, dressmaking, and millinery. The finished products of these shops are readily absorbed by the local demands of the school. In this respect carpentry and cabinetmaking is not quite so good, but the local school demand is enough to keep a small force of boys busy, besides many of the finished articles find ready sale outside. The teaching of art is opposed by some near-sighted, hard-fisted utilitarians. While it is not advisable to teach drawing and painting on a large scale as an occupation, the refining influences of art are unquestioned, besides its reflex influence upon every other occupation taught is of incalculable value. It develops a higher order of taste, and the ideas of proportion, design, perspective, and harmony of colors. I would teach some art to every child in school. Designing and drafting should, if possible, be taught in the shops by the trades instructors and should be adapted to the particular trade. Other occupations that conform more or less to the above two rules might be mentioned here. But this problem of selection can best be solved by each school for itself. The conditions of adaptability vary greatly in schools throughout the country. It is not advisable to undertake a large number of trades. The number should not exceed the ability of a school to teach efficiently. It has been stated before, and I wish to repeat the proposition with emphasis, that it is better to teach a few trades well in shops thoroughly equipped than to undertake a larger number with inadequate facilities. The ambition is perhaps a little too great on the part of schools to report a long string of trades and occupations for the annual statement published in the American Annals.

A plan is being worked out in some large manufacturing centers whereby students in the public schools are placed in shops and factories to learn trades under the supervision of instructors supplied by the management of those shops and factories. There is a suggestion here for those of our schools similarly situated. To what extent is it practical to adopt this idea? If it could be successfully put into practice there would be a great saving for the schools affected in the way of shop equipment, materials, and the salaries of instructors. Still another plan has lately been conceived by the Goodyear Rubber & Tire Co., of Akron, Ohio, that of carrying the schoolroom to the factory and undertaking the literary instruction of their deaf apprentices. We may well watch this enterprise with a great deal of interest. I believe, however, that such a scheme should be confined to the graduates of our schools, young men and women with more or less maturity of mind, whose characters have been reasonably formed and habits well fixed. I do not favor allowing young, half-educated boys and girls to go from under the restraint of our schools. What should be the policy in the matter of curriculum and methods of instruction and grading for our industrial departments? In these things many of the schools for the deaf, ours among them, are sadly behind the times. It will be admitted by all that there should be a fairly complete course of in-

struction for each trade or industry taught, with proper sequence of gradation. If this is essential for the literary department, it is equally so in the teaching of the industries. The literary or intellectual part, if you please, of trades teaching should be done in the shops by the industrial teachers as much as is practicable. We should carry the schoolroom into the shops rather than the shops into the schoolroom. There should be a large blackboard in each shop upon which this work can be done. Here the terminology of the trade, the names of tools, and the description of operations should be taught. A simple manual for each shop, cataloguing and defining terms and operations, would be exceedingly helpful. There is no objection to submitting some of the shop problems for solution in the schoolrooms. Material that is alive, that comes nearest the pupil and appeals to his interest is, of course, the best, and a shoe-shop, cabinet-shop, tailor-shop, sewing-room, or domestic-science problem would at once enlist the interest of the pupils who are engaged in those industries, but would not interest the others in the class so much.

In the shop problems could be selected that apply to the particular occupation taught, and the conditions ought to be such that the trades teacher would be the one best qualified to do this work. Cost accounting is an essential feature of the work in every shop. We should teach our pupils how to arrive at the cost of the finished product by determining the cost of the material that goes into it and placing a price on the labor required to produce it, thus putting them in possession of what so few acquire at school—a knowledge of the business part of their trade. In order properly to grade his work, the trades teacher should keep in touch with the advancement of his pupils in the literary classes. This is a species of coordination that it is well to insist upon. It may yet be too early to adopt in toto the policy pursued by the high schools of the country of dovetailing the industrial with the literary course and giving credits for work done in the shops, such credits to count toward the securing of a diploma. But in my opinion we must come to it sooner or later. Aside from the palpable benefits accruing, such a policy would put a measurable quietus upon the oft-repeated demand that pupils be allowed to come back after finishing their literary course for further instruction in the shops, a plan to which there are grave objections.

The most important work, I take it, that any school has to perform, and one intimately related to its whole scheme of industrial education, is that of character building, and here is certainly one place where the literary and trades departments can and should thoroughly coordinate their forces. In this day of growing friction and perhaps bitterness between employer and employed, when each side is trying to get the upper hand in a controversy, and unjust methods are resorted to, it is more necessary than ever to instill into the rising generation the principles of absolute integrity and charity born of the spirit of give and take. In our commercial relation more than in any other relation, perhaps, and more now than at any previous period in the commercial history of the world should the rule, Do unto others as you would that they should do unto you, in spirit as well as letter, be adhered to.

When the employer resorts to sharp practices, not only to cheat his customer but to circumvent his employee, and the latter, taking his cue from the former, tries to do him in an unjust deal backed by force of numbers, it is essential that we take account of our ethical stock in trade and determine whether it is not running too low; whether, indeed, the scale does not indicate a level dangerously near the dregs. When, as a nation of workers, we are becoming strangely affected with some bug of ethical heresy, the quaint prayer of Robert Burns, "Oh, wad some power the giftie gie us, to see oursels as ithers see us," becomes of timely application. What should we do, what can we do more than has already been done to improve the morale of those whom Providence and the powers that be have placed in our hands?

Though our material may not be as plastic as clay in the potter's hands, on account of certain perverse elements in human nature, we should do our utmost, by precept and example, by reason, rule, and regulation, to make our part of the human family honest, sincere, thoughtful, efficient, thoroughly trustworthy in all their relations with others. We should impress them with the valuable ethical truth that these qualities are to be acquired and practiced not only as a matter of policy but of duty. It is well to illuminate the policy feature often by powerfully impressive illustrations; these are things that the mentality of our children can grasp much more readily than abstract truths. But if we stop here we stop sadly short in the process of character building, the most complex and difficult job that our Creator has imposed upon us.

The teaching of these virtues with a view to their practice merely for policy's sake begets a species of selfishness and shrewdness that does not make for strong, rugged character, and when inevitable supreme test comes there is likely to be a tumble. No; we should stress, with all the power of illustration and persuasion at our command, the acquiring and the rigid practice of these qualities as a duty imposed upon us by the fact of our existence as beings in whom the Creator has planted souls to be developed and by the fact of our relations with other like beings and with Him who is the supreme source of good. The beauty of integrity, of honesty of thought and deed in all our relations with our fellows, the satisfaction of doing things well, the happiness resulting from such performance can be brought out by illustrations from life. After all, happiness obtained in this way is what the soul, when not hopelessly depraved, craves, and it is the only happiness worth while. Happiness derived from the mere satisfaction of one's selfish commercial instincts is of a low order; it is not the real goods, but a counterfeit; it too often signalizes the perversion of the noble instinct ambition. But it is the kind of happiness that in a materialistic age is exalted and sought after. We should teach our boys and girls to strive after a high order of happiness, one that satisfies the craving of a soul that lives and moves and has its being in harmony with the attributes of a living perfect Christ. Is this impractical? If so, then our Saviour, Teacher, and living Exemplar has set us an impossible task.

But we are pushing clouds. Let us lower our plane to earth and get at the practical application. The industrial teacher, like the literary teacher, should have certain well-understood rules and regulations and exact strict adherence to them. He should require that his students come into the shop promptly, go to work at once and not waste a few minutes every time they enter dawdling around; he should insist upon their continuing diligently at work until time to stop; he should require them to put away tools and materials carefully when done with them; he should vigorously frown upon carelessness and at all times demand neat, honest, painstaking work. Much in afterlife depends upon the forming of correct habits in our industrial department. Selfishness lies at the root of all dishonesty, and sharp practices are the ripened fruit. It is clearly the duty of everyone who has to do with the care and education of our boys and girls not only to portray in vivid colors the hideousness of selfishness and its resultant evils but to be punctilious in the practice of unselfishness and all the fine virtues that flow from it. Our children more than any other class of people are influenced by the example of those placed over them. Their characters are made or marred by such example. No person who does not display the strictest integrity has any right to be in positions of authority over them. Especially is this true of our industrial teachers, for the code of ethics practiced in our shops will be carried by our pupils into their industrial relations after leaving school; the whole moral atmosphere of our shops will be reflected in the afterlife of our pupils. If the instructor is careless about little things, if he is wasteful, if he is indolent, if he is indifferent about coming into his shop promptly on time, if he knocks off before the hour for closing, if he watches the clock with impatience, if he heeds not the promptings of conscience to turn out honest work, but practices deceit by concealment of blunders and evident shortcomings, we may be sure that his students will get things into their characters that will prove stumblingblocks to them for all time. God help a school, if there be such, where dishonesty and deceit are of common practice and lightly thought of. A superintendent once told the writer that if the Creator looked down upon the character of employees He often furnishes our schools He would be ashamed of His handiwork. Of course, this is an extreme and pessimistic view, and withal a sacriligious one. But superintendents can not exercise too much care in the selection of their assistants. Time was when the character of an applicant as well as his ability to do the work expected of him was thoroughly inquired into. Latterly, when the demand has far exceeded the supply, we have sometimes had to take what we could get without scrupulous inquiry into the character of the applicant. More's the pity. But it is earnestly hoped that in God's own good time a brighter day will soon dawn upon us.

Mr. BRAY. Mr. Chairman and remaining members of the convention, this puts me in mind of the story of a man that was giving a lecture in a western town in connection with a lecture course. It happened to be on a very cold night and there was only one man in the audience. He waited quite a while and finally he said: "Well, I al-

ways go through my usual program whether I have a large audience or not." The man in the audience said: "Oh, go ahead; that's all right; I am just the janitor. I will put the lights out when you are through."

Mr. Chairman, when I have spoken for five minutes, if you will sound the gavel, I will quit within 30 seconds. [Laughter.]

I am not used to writing papers; in fact, I never wrote a paper for a convention of teachers but once in my life, and then I wrote two. I had about 300 teachers to address in the western part of Wisconsin one time, and the first part of the week I wrote a paper, and after thinking over it while I was traveling about the city and the country places, I discovered that it was not just what I wanted, so I wrote another; and then at the convention I gave the paper to one of my supervisors, and I said: "You kind of follow me and boost me up when I need it." I noticed she was unnecessarily annoyed at different times, and finally she dropped the paper. I got through all right, but I asked her afterwards: "Well, now, how did you get along?" "Well," she said, "you didn't give anything of either paper that I could discover."

So I never write papers any more, but I was very much interested in reading this paper, and I have learned a good deal from it. The things that I have learned most at this convention, however, have not really been from the papers, but from listening to the conversations of teachers and older superintendents. I have my problems the same as you have yours, and one of the problems that has vexed me for the last 18 months has been solved, I think, by simply listening to some of the older superintendents give their experiences with reference to the very same thing that has been bothering me. Some remarks that I heard from Supt. Jones and Supt. Tate last evening really mean much more to me than anything else I have received from the convention.

One of the things in vocational training that every teacher and every superintendent should have impressed upon him is to know what he has to work with. A good doctor when he takes your case wants to know the history; he wants to know your age, your habits, the previous history as far as possible. He looks at your eyes, at your tongue, feels your pulse, because he wants to know what he has got to work with.

A little over a year ago, with the assistance of Dr. Pintner, of the Ohio University, we had an educational test and a mental test of all the pupils in the institution in Wisconsin. Every teacher now knows just what she has to work with, from a mental standpoint, from the pupils that were examined; she knows just exactly what she has to work with from an educational standpoint. Nor do we stop with that. We have our nurse and our institutional doctor look over our pupils, not only at the beginning of the year but all through the year. This is followed up. One of my teachers was complaining not long ago that a certain pupil was doing so poorly in lip reading, and we discussed the matter, but could not come to any definite conclusion. Finally the nurse came to me and said, "I know what the matter is; that boy can't see. He needs an optician, not a teacher." So I took the boy to an optician and had him examined and fitted with proper glasses, and he accomplished more in the next 90 days than

he had ever learned in that particular line in his life, and now he is a good lip reader.

The same thing is true, of course, in the vocational line. We want boys to learn trades, but it isn't every boy that can learn every trade. We had a boy for a year and a half in the carpenter shop, and finally the vocational instructor came to me and said, "We never can make a carpenter out of that boy; it isn't in him." He was transferred to the shoe shop, and in three weeks the foreman of the shoe department said to me, "We never can make a shoemaker out of this boy; he can't drive a nail." So in talking with the the vocational man in a short time he said, "There is just one thing to do with this boy—get him to use that poor old left arm of his and get him to drive a nail and put him back in the shoe shop." So I turned him over to my painter, and he had him turn the edges of cans and pound with that arm for weeks at a time until he was able to use it; then he was returned to the shoe shop, and in a short time he was able to drive a nail, and has fair prospects of making a good shoemaker.

I have in the State school a field worker. I don't know that I can outline all the work that she is expected to do. One of the things that she is expected to do is to hunt up new pupils, and we find in the hills of old Wisconsin boys that have grown to 14 and 15 years of age who never knew there was such a thing as a school for the deaf in the State of Wisconsin. We have 1 State institution and 22 day schools.

Another thing she is expected to do is to follow up the boy and the girl after they finish the school—even before that time—during the summer vacations when they are employed at home or in the factory or on the farm, and she reports to the teachers and to the superintendent with reference to their work.

One of the bad features in the vocational work is the fact that pupils very often, and parents, too, wish to have the boys and the girls changed from one trade or from one occupation to another. I was glad that the gentleman that wrote the paper mentioned that fact. A great deal of time is lost; there is too much lost motion by allowing that thing to occur; so we have the vocational man and the field worker watch that very closely. Unless there is mighty good reason for a change, unless the boy or girl falls down entirely, no change is made.

With us in Wisconsin farming and dairying is an important occupation. The legislature has just purchased for us enough land so that we now have 100 acres. On that farm we expect to raise a good deal of the material that we consume in the dining rooms, and it surely will be a great help, and is at the present time a great help to us in a financial way. About 60 per cent of the boys that come to me come from the farm, and nearly 50 per cent of those boys go back to the farm, and we have some very substantial farmers among the deaf. One of the members of my faculty is a graduate of the school, later of Gallaudet College, and I think he has been with the institution 25 years. He was supported by the State until he got through school, and now he owns 360 acres of land and his income a year ago was over $7,000 from the farm alone. He married a semi-mute girl from the institution, and they have raised a mighty fine family of two splendid daughters, both of them graduates of our

State university. He has given a church to his community, and at the present time he is building right across from the institution a clubhouse for the deaf, which is going to be a monument to the deaf boy that has been turned out from the Wisconsin institution and who has made good on the farm. He spends his summers upon the farm, and his wife manages it the rest of the time. Thus we find it certainly very profitable for our boys and for our girls to know the farming game. So the board of control expects to give us between $3,000 and $4,000 a year from now on to work with in connection with our experimental farm. We expect to have a summer course, in which some of the boys that have not had an opportunity of having this training in farming may come back and work under an experienced teacher in agriculture. I have a list now of over 25 boys who are now on the farm. They have finished school, but want to come back and learn more about the agricultural work.

We have just had a reunion of the deaf of the State. We had nearly three or four hundred in attendance, and they were very enthusiastic over what is being done in the agricultural lines, because most of them have gone into that work.

No one State, no one institution, can outline the industrial work for any school, because the different States demand so much of us in different lines. It would not be a good thing for us, probably, to have some of the lines taught in our school, some of the trades that you have, because when the boys get through they would have to go out of the State in order to get employment. That is another thing that we are trying to do—we want to keep all our boys and all our girls in our own State as far as possible. We do not demand that, but the field worker tries to locate them as near as she can in our own State. This is not my hobby, but the members of the board of control claim that the State of Wisconsin educates these boys and girls and trains them and would like to have them be producers in our own State as far as possible. Dr. Robinson, who has been with the school nearly 35 years, has also worked out this idea, working with my field worker along this line. He dislikes very much to have firms like the Goodyear Rubber Co., of Akron, Ohio, come into our school and take our boys and our girls away from us after we have spent so much money on them. If they stay with us, they return what has been given to them manyfold, and we are happy to say that we find more jobs for the boys and for the girls that are trained in the institution than we can possibly furnish. Last year we turned out 2 printers; we had calls for 10. This year we turned out 6 shoemakers; we had calls for nearly 25 from one city. So you see we don't have any trouble in locating them.

I think that my five minutes is up. I don't know whether the chairman forgot the gavel or not, but I thank you. (Applause.)

Dr. Rogers. I heard Superintendent Jones highly complimented this morning on the brevity of his session yesterday afternoon; that he got through on time. By my watch I am through on time and I am not going to permit any further discussion because at this hour the Progressive Oral Advocates have the chapel. I wish I could allow further discussion of this interesting subject.

(Whereupon, at 4.45 o'clock p. m., the meeting adjourned.)

EVENING SESSION.

The convention reassembled at 8 o'clock p. m., Superintendent J. W. Jones, presiding.

Mr. JONES. Dr. Crouter has some announcements to make.

Dr. CROUTER. By special request Miss Evans will give a repetition of the demonstration of her class in third-year work to-morrow morning from 8.45 to 9.30. This is a most interesting demonstration and was greatly enjoyed by those who saw it this morning, and request has been made that it be repeated to-morrow morning in Cresheim Hall from 8.45 to 9.30.

Mr. JONES. I have looked over this program from beginning to end to find a place where I might say one thing that is on my heart, but I do not find any place provided for it, so I shall exercise the prerogative of a chairman and tell you that 24 years ago just now I attended the first professional meeting of the educators of the deaf after I became superintendent of the Ohio school. I had been attending the National Educational Association in Detroit, and after it was over I took the train and came to Mount Airy. I had on a little light summer suit, a skeleton coat—the only clothes I took with me, because the National Educational Association does not make very much pretense to dress. But when I got into this institution I ran into a sea of dress suits. It must have been a reception. But for that matter, almost every evening was a dress-up evening. I must have been a curiosity because I was the first superintendent to be brought in from the public schools, and an additional curiosity with that little, white skeleton coat on in comparison with the gay dresses of the other superintendents.

Dr. Bell, who was then a very striking and leading figure, as he has been for many years in this association, gave a reception and banquet in one of the hotels and invited me. I pleaded to be excused for want of clothes, but he said that was the very reason he wanted me. [Laughter.] So I attended that banquet, and to my great surprise, and without any previous notice, I was called on for an address.

I believe—and I say this in all sincerity—I believe I learned more from that meeting of the association than all the other people that attended it put together. I sat at everybody's feet; I learned from everybody, and could not understand why superintendents and others long in the profession were around under the trees when such capable women as Miss Thomason and Miss Bliss and others were giving exhibits of their class work.

I remember my first meeting with Dr. Crouter. What a striking personality he was, and I remember my first meeting with Miss Yale, who was a leader in the meeting. Her quiet dignity and reserve made me afraid. I remember meeting the men and the women that were leaders in the profession. I thought it was a great aggregation of people, strong in intellect and force of character, and if I could ever by any means work myself up to the point of commanding their respect, I should be a very happy man.

As I stand before you to-night, I recall that there are only four or five superintendents present that were present and leading in the van of work 24 years ago. It would make you sad if I should call

the roll of absentees, and I do not wish to make you sad. Twenty-four years has wrought many changes. But the work is in good hands, and will always be in good hands; it is too good a work ever to be in any than good hands, but these changes will come. The responsibility must fall upon new people, and I say to the new people—and our profession is full of them to-day, fuller than ever—"if you meet your obligations honestly, truly, fearlessly, thinking of nothing but the good of the deaf child, the whole child, nobody can disturb you, and you will succeed in spite of any obstacles which may come; but if you forget that great fact and dodge and trim and hide and misrepresent and sham you can count on failure as sure as the sun shines." That is a good piece off of the program and we shall proceed with it. [Applause.]

A few years ago in the Ohio school we began making tests of the mentality of our pupils. The school is within 3 miles of the university, and through the department of psychology these tests were started, first by Donald G. Patterson, the son of the principal of our school, Dr. Robert Patterson. He was making a test for the department of juvenile research. He became a pupil of Dr. Pintner, and he and Dr. Pintner carried on the work for quite a while until young Patterson left the State to do work in another college and later to the war. Dr. Pintner has pursued the work since. He has had the freedom of the school and has ever been welcome.

At the meeting of the committee on efficiency at Indianapolis his work was reported to the members of the committee. All of the other members wanted their schools tested also, so Dr. Pintner was called to Indianapolis, to Philadelphia, and to Kentucky, and then a report was made and published in the magazines, and he has been called into the service of a great many schools since.

Now, after an association of several years with Dr. Pintner I am prepared to say to you that he is 100 per cent in his profession, as Dr. Crouter stands 100 per cent in his great work. I take pleasure in presenting to you a man to-night who is 100 per cent. [Applause.]

Dr. RUDOLPH PINTNER. Ladies and gentlemen, I feel very much at home here with Mr. Jones sitting behind me and introducing me and saying nice things about me. He has done that so often—and Mrs. Jones right there and other people, as well as my friends from other States.

My subject seems a very formidable subject as recorded on the program. I am going to talk about the topic that a lot of you have heard me talk about before; in fact, I feel sometimes that I owe half an apology to many of you, because you have heard me so much before. Mrs. Jones was unkind enough to say just a few minutes ago that when she saw the little dots they looked quite familiar to her on the blackboard. [Laughter.]

Mr. Jones has outlined how I got interested in the work of mental testing of the deaf, but he hasn't said, however, how thoroughly sympathetic and kind and good all the superintendents and principals and teachers of the deaf have been that I have met. Without their cooperation, without their assistance, I should have gotten nowhere. So it is owing to you largely that I can tell you about the things I am going to tell you about to-night.

My paper is put down on the program as a standardization of schools for the deaf. Now, I got scared of that title, "Standardiza-

tion of Schools for the Deaf." It seemed like an attempt to cover a topic about 100 miles long and 100 miles broad, and I wrote Dr. Hall and suggested, perhaps too politely, that he should restrict my paper a little more to the actual thing I am to talk about, but it didn't seem to have any effect on Dr. Hall, so I am only going to pick out a little bit of that large subject of standardization of schools for the deaf.

STANDARDIZATION OF SCHOOLS FOR THE DEAF.

By RUDOLF PINTNER, Ph. D.

The title of my paper to-night covers a subject that is far too extensive for anyone to hope to discuss in one evening. Indeed, I shall have to restrict myself to certain aspects of the topic, and naturally I shall turn to those questions of standardization with which I have been more intimately connected for the past few years, namely, the standardization of mental and educational tests for deaf children.

Standardization at the present time is a much-used word. It is a familiar concept in the world of industry, and some of the great advances made in modern times have been due to the standardization of the product and the procedure in the industrial field. More recently standardization has begun to play an increasingly important rôle in modern education. Its value has been demonstrated sufficiently. Education is receiving a tremendous stimulus as a result of the measurement of the product and procedure that is now taking place. We have learned a great deal in the past few years from the educational surveys that have been conducted in our schools and colleges.

What is the value of all this measurement that is taking place in our schools? The great value, of course, is that it gives us accurate knowledge of where we are at the present time. It shows us just how much we have achieved. It gives us for the first time some sort of idea as to what we are accomplishing in the field of education. It enables us to compare accurately the achievements of different schools and to estimate the relative value of different methods of teaching. In short, the first important result of measurement is to show us the facts as they exist at present—just what we are accomplishing in education.

From this follows the other important result of the present era of tests and measurements. Knowing from them exactly where we stand at present, we are able to get some vague conception of where we want to go, of the aim to be achieved. Standardization, measurement, sets up goals to be achieved, definite concrete ends to be attained—not ideal aims that are unattainable. Those, of course, are ever present and are the great stimuli for all educators. But to attain these dim and distant ideals we need milestones along the road to cheer the weary traveler on the way, to reassure him, to show him that he is actually making progress. Educational measurements set up these milestones for us. They show us that to-day we have achieved so much; that to-morrow we may hope to advance so much further. They give us faith in the weary progress toward the unattainable ideal of the perfect education.

Educators in schools for the hearing have so far made much greater use of tests and measurements for the purposes of standardization than have the educators of the deaf. We may therefore with profit learn from them the type of thing that can be done.

1. *The plant or physical equipment of a school.*—Quite a little has been accomplished in grading the school building. Prof. Strayer, of Columbia, has devised very interesting score cards, by means of which reasonably accurate measures may be obtained. A State-wide school-building survey has been carried out by him in the State of Delaware, and the results have been most interesting and undoubtedly profitable to the citizens of that State. It would be of considerable interest and immense value to have a similar survey of schools for the deaf over the whole country. It would be of immense help to every superintendent and of direct value in specifying his needs in the matter of building and equipment before the State legislature.

2. *The teacher.*—More important than the building is the question of the teacher and the training of the teacher. Now that the shortage of teachers is acute, it would be most helpful to have some nat onal survey so that we might know more fully the actual situation, and, knowing it, take more intelligent steps to meet the emergency. Questions of salary and promotion should be

studied so that we might aim to make the profession more attractive in the future.

Under this topic of the teacher must also be mentioned the various rating scales that have been devised to measure the efficiency of the teacher, and the possibility of employing them with teachers of the deaf should be considered. I see also looming up in this connection the difficult and intricate question of the training of teachers for the deaf. An attempt at standardization in this connection would be valuable and would be sure to help to raise the dignity of the profession. I can only suggest these topics for your consideration in this place. My own knowledge of the subject is not sufficient to go into detail.

3. *The curriculum*.—Here, if anywhere, standardization could accomplish a great deal. The differences in grading and the nomenclature employed in schools for the deaf are weird and wonderful in the extreme. There is crying need for some agreement on a uniform system of grading, so that we might be able to understand each other, so that when we talk of Grade III it will mean something as specific and definite as it does in speaking of a hearing school. In my work in giving tests and measurements in deaf schools, I have had to abandon any attempt to formulate forms or standards for different grades because of an absolute inability to determine equivalent grades. I have been in a large institution in which there were no grades, where the classes were referred to as Miss So-and-So's class, and where even the principal hardly seemed to know what grade of work was represented. There are all types of systems, some with letters and others with numbers. I wish to make a plea for some attempt at uniformity, and I should consider that we had made a great gain in the education of the deaf if we could lay down a minimum standard course of study and a uniform nomenclature for our classes. We should have a certain number of grades in elementary work and a certain number in high school, and the work of each grade should represent about what the normal deaf child can accomplish in a school year. I do not wish to be misunderstood. There must be no attempt to take away the initiative and independence of the principals in arranging a course of study. There ought to be differences from school to school. We do not want anything approaching a cast-iron course of study, from which the teacher is not allowed to deviate, but we do need a common basis, a definition of the minimum essentials, arranged in an orderly sequence and so divided as to grades as to be adapted to the normal deaf child's progress from year to year. A survey of the deaf schools could find out the situation as it now exists and could bring forward definite recommendations, which all progressive superintendents would be glad to try to approach.

4. *Educational measurements*.—During the last 15 years educational psychologists have constructed a vast number of scales for the objective measurement of all the important subjects in the elementary and high schools. These scales have been extensively used in hearing schools and we now have reliable standards for all grades. By the application of these scales a superintendent of a hearing school can very easily tell whether his pupils are achieving the standard of attainment in any subject in any grade. You are undoubtedly all familiar with the importance of these measurements in the ordinary school survey. They are proving of infinite value to the progressive school superintendent.

Now, let us suppose that a survey committee has been charged with the study of the curriculum and the determination of minimum standards for the several years of work in deaf schools. Such a committee would have at its disposal these educational scales for the common-school subjects, and by an extensive use of them in deaf schools could arrive at tentative minimum requirements for each grade. A systematic use of such measures from year to year would gradually give us measures of the normal progress of a deaf child from year to year, and thus we could build up a valuable curriculum for the guidance of suptrintendents and principals.

I can not urge strongly enough the wider use of these educational scales among schools for the deaf and the publication of the results. I have been a constant reader of your professional publications, The Annals and The Volta Review, for the last four or five years, and I have been struck by the absence of any reports of the type of work I have been describing. So far, this movement for the measurement of the results of education, which has exerted such a profound influence in hearing schools, does not seem as yet to have exerted any influence at all in deaf schools. It may be, of course, that many of you are using such scales, but, if so, you are not giving the rest of us the benefit of your experience. I am afraid that I myself am about the only one who has

been guilty of doing any of this work in deaf schools and in publishing the results. My own work has necessarily been very restricted, but, even so, it has suggested many interesting questions.

The giving of language tests in one large school has shown the unevenness of grading in several sections of the same grade, the tremendously large differences in ability in children of the same class, and it has suggested the improvement that could be made if the results of such tests were used more systematically in the grading and grouping of pupils.

There is no reason why most of these educational tests should not be given by some or all of the teachers, and where such a policy has been followed in hearing schools it has been found to be a splendid means of stimulating the teachers and of arousing a more scientific attitude toward their work.

5. *Mental tests.*—The last type of measurement that will aid us in standardization is the measurement of the native ability of our pupils. Assuming that we have a survey committee to standardize the deaf schools in this country, one of its important functions would be the nation-wide use of mental tests for the measurement of the mentality of the deaf. An accurate measure of the quality of the material with which we are working is absolutely necessary for a thorough understanding of the problem of the education of the deaf. If we wish to know what we can achieve, we must know more intimately the mental make-up of our pupil material. If we wish to do justice to the abilities of each and every pupil, we must attempt to obtain as accurate a measure as possible of each one of them. We must see to it that we are making use of all the intelligence that our pupils possess. The conservation of the intelligence of the Nation is more important than the conservation of our national forests or of our coal, or of any other material resources, and we have reason to believe that the wastage in our intellectual resources is greater than the wastage, great though it be, of our material wealth.

It is this type of measurement in which I have been most interested, both as applied to the deaf and to hearing children. Nothing would interest me more than to see a nation-wide survey of deaf schools with respect to the mental ability of the pupils, and such a survey would fall very properly within the scope of a survey committee such as I have been suggesting.

The largest survey that I have been able to undertake on my own initiative was carried out during the winter of 1918–19 and covered 15 State institutions and 11 day schools in 9 different States. Altogether about 2,500 children were tested. It has taken some time to work up all these data, and I want to-day to show you some of the results and to demonstrate the important questions that surveys of this type are sure to raise—questions that will give us food for further thought and study. Some of the results of this work I presented befor the conference of superintendents and principals at the Columbus meeting last December, and I must apologize to those who heard me then if I repeat myself to some extent. There are many new points, however, that we have found time to analyze since that meeting.

The purpose of the survey was to obtain a rough measure of two things, namely, the general intelligence of the deaf child, and, secondly, the ordinary educational attainment of the deaf, such as could be measured by means of a written examination. You must, therefore, remember that one important product of a deaf school, namely, speech and lip reading, has not been covered by this survey.

The tests used were two group tests—one for the measurement of mentality and one for the measurement of educational attainment. The tests were devised for this special purpose and in all respects were well fitted for the deaf. I shall not describe them further because I know they are familiar to most of you. The aim, then, was to get a double measure of each child, class, and school, and by a comparison of mental and educational attainment to get some estimate of what each child, class, and school should be doing on the basis of the mentality possessed by them. Our standard of measurement on both tests is a scale of index numbers running from 0 to 100, with 50 representing the true middle and with each step denoting the same amount of difference. The middle part of the scale, from 40 to 59, represents the average, or normal, deaf child. Those with indices above 60 are good and those above 80 are very good. Similarly, those below 40 are poor and those below 20 are very poor.

Having now standardized our tests, let us see of what practical use the results can be.

6. *Comparison of different schools.*—Here is a chart showing the standing with reference to mentality and educational attainment of all the schools tested. Such a chart as this is of importance to every superintendent.

(Description of chart.)

[As many of Dr. Pintner's charts appeared in the April Volta Review, they are not reproduced here.]

Three groups of schools are easily distinguishable: (1) the first exploiting to the full the intellectual resources of their pupils; (2) the second merely maintaining a normal output; (3) the third sadly wasting these resources.

7. *Analysis of one school.*—Each school can be further analyzed as to its mental and educational standing. We can raise the question specifically as regards the different grades of pupils and their educational work, as to whether we are giving the dull and backward as much as they can assimilate, or whether we are putting our whole emphasis upon the normal group and neglecting the others, or whether we really appreciate the presence of the bright child and are giving him what is suited to his mentality.

(Description of chart.)

8. *Analysis of a class.*—In addition to these analyses, we can still further study the mental and educational standing of each pupil within a given class, and raise exactly the same questions with regard to each pupil as we have raised with regard to the school as a whole.

(Description of chart.)

9. *Practical suggestions resulting from this survey:* (*a*) *The coaching teacher.*—Children not working up to capacity represent wasted intelligence. This must be stopped. Ordinarily the regular teacher has not the time to give extra attention to these, very often, bright children who are capable of better things. Often the regular teacher is not fitted and does not really understand the problem. The solution we have found in hearing schools to be the appointment of an extra teacher for coaching purposes. Such a teacher should be of high caliber and should have a clear conception of her work. She is not to deal solely with backward children; she has to deal with all children who are not doing themselves justice, and as a matter of fact it will be found that most of her work will be with the normal and bright child. She will meet these children singly or in small groups, for an hour or so each day, until such time as the discrepancy between their mental ability and educational accomplishment has been removed.

(*b*) *Closer classification of pupils.*—Pupils of like mentality will work better together. The more homogeneous a group is, the easier will it be to teach and the more progress will it make. Our results show a great amount of overlapping in both mental and educational ability in all grades. In one large school we found in the fifth grade children who scored from 70 to 470 points (out of a total possible of 600), showing a very wide difference in abilities. Similarly, in the ninth grade on the educational test they ranged from 15 to 65 points (out of a total possible of 140). Closer grading of pupils will pay large returns in increased efficiency of teaching, general happiness of the child, and in the elimination of disciplinary problems.

(*c*) *Quick and accurate assignment to grade.*—Tests of this kind will enable a superintendent to assign a new pupil quickly and accurately to the grade in which he belongs. They will do away with much guesswork and save the waste of time involved in the usual trying out of a pupil in a grade, and, finally, the crime of misplacement that may never be discovered.

LARGER QUESTIONS RAISED BY SUCH SURVEYS.

10. *Oral and manual pupils.*—Other interesting questions besides those bearing directly upon the organization of a school are raised by the results of such surveys. In time I have hope that continued study and measurement will be able to help settle vexed questions as to methods of teaching. In this respect no topic has been more vigorously discussed than the relative merits of oral and manual instruction. In discussing these results I wish you to bear carefully in mind that we have only measured language as it is written. So far we have no measurement of speech or lip reading.

(Description of chart.)

We may conclude that each group is accomplishing about what it ought to accomplish with reference to the mental caliber of the pupils. The oral method, therefore, does not seem to lead to a better comprehension of the language as written or to better comprehension of history, geography, and arithmetic. In psychological terminology there is no indication of additional transfer from speech and lip reading over and above any transfer that may exist from signing

and finger spelling. Manually taught bright pupils do not get enough stimulus, but the manual method or its teachers seem to produce better results educationally with the very dullest pupils.

11. *Comparison of hearing and deaf.*—Finally, we come to the interesting comparison of the deaf and the hearing. Here are charts showing the median score at each age for the hearing and deaf on both tests. In both the deaf fall below the hearing, as we should expect.

(Description of charts.)

The deaf are poorer relatively on the educational test than on the mental. Comparing the age norms with comparative norms for hearing children, we find the deaf to be about five years retarded educationally and about three years mentally. The difference of two years between the two types of test is probably a measure of the language handicap under which the deaf suffer.

12. *Conclusion.*—These, then, are the types of problems, both practical and theoretical, that are raised by the scientific measurement of educational procedure. The attempt to standardize and the use of scales in the process of standardization will lead us to a better understanding of the pupils with whom we have to deal; and, knowing the pupils better, we shall be better able to construct an adequate curriculum and define the goal of education, and, with a more definite aim and better curriculum, methods of teaching can be more adequately adjusted and the work of the teacher more justly evaluated. In short, we shall know more, and, knowing more, we shall have power to accomplish. I sincerely hope that in the near future some definite and concrete steps may be taken for a thorough and nation-wide survey of schools for the deaf.

Mr. JONES. At the close of the discussion there is a called meeting of the Conference of Superintendents and Principals in this room. The superintendents and principals mean the executive officers of the schools for the deaf. Day schools having a principal and some teachers, the principal is entitled to attend this meeting and to vote; day-school teachers without any subordinates are entitled to attend the meeting, but, as I remember it, are not entitled to vote. We would like to have a full representation.

Dr. CROUTER. And the principal of a department?

Mr. JONES. The principal of a department is entitled to attend but is not entitled to vote.

It was hoped that this program would close at 10 o'clock, but you were late in coming in, and for that reason it was not started until 8.30 in place of 8. I hope, however, that the able gentlemen who are to follow in discussion here will keep their eyes on the clock, and if they can get through in 10 minutes and say all the good things they have to say, we shall be glad; if it takes them 15 minutes we shall grant that time. But knowing Mr. Johnson's great enthusiasm on this subject and his ability to go a long trip when he is discussing it, I shall ask all of you to watch the clock a little. It gives me much pleasure to present Mr. Johnson.

Dr. R. O. JOHNSON. It seems that there is a misunderstanding as to the subject to be discussed to-night. I supposed it was "Standardization" pure and simple, as did Dr. Pintner until he wrote to Mr. Hall about it, but it seems no change has been made. It was my expectation to talk upon the standardization of methods and procedure in our schools; in fact, upon special invitation of Dr. Crouter and the committee on program, I had prepared a paper that would take about 45 or 50 minutes to read, outlining a method of standardization for schools for the deaf; but I am just now informed by Mr. Jones that I have only 10 minutes to talk because of some other arrangements he has made, so I am going to relegate the paper to the past and forget it, and crowd several disjointed thoughts and more or less rambling ones into a very unsatisfactory 10-minute talk.

In so far as Dr. Pintner's description of those tests is concerned, I do not see that anything is to be said concerning it. He has made a thorough examination, announced his findings and conclusions, has depicted the conditions, and that is all there is to it. While we might discuss differences in the findings and conclusions concerning the manual work and the oral work, yet I hesitate to touch upon the subject, because I am afraid if I get it started here this evening it may not end in the next four years. [Laughter.]

But I am going to speak for just a few minutes upon standardization. We do need standardization in our schools for the deaf. As they stand now they represent apples and pears and peaches and plums and all these varied fruits, and somehow, or some way, it is imagined by some people that these fruits may all be combined into one and get a watermelon from them, but it can't be done! [Laughter.]

Yet, these schools should be standardized along certain lines so that they may be somewhat justly compared—and that is possible. I may say there is no question but what it can be done, and easily done, if a method is outlined and the superintendents will agree, not from the lip out but from the heart out, to go into a new standardization scheme. I want to say in passing that in measurement of efficiency, in measurement of classes, in measurement of schools, and in the measurement of pupils' progress, we can not measure them in this term and that term and the other term, and that there is one term in which the measurements may be made, and it is the only term, according to my notion, in which they can be made justly and with more or less exactness—that is, in the terms of the hearing child, and of schools for the hearing. That can be done. It means an age-grade scale; it means an analysis of pupils, of the school grades of pupils, of the rates of progress, of the retardation of pupils, and of the repeaters of grades, and especially of the normal age-years to be assigned to the various grades in a classification.

This committee has had this matter in hand for these many years—and, by the way, I wonder if you all remember that it is just six years ago to-night, July 1, 1914, that I introduced the resolution there in Staunton, Va., calling for standardization and for the measurement of efficiency—just six years ago to-night. This committee has approved a scale, an age-grade scale which I have devised, by which every school can be measured. It has recommended that 12 years be considered as the regular course of study for the years allotted in school—5 primary grades, 2 intermediate grades, and 3 advanced grades, making 10; and, preceding the primary grade, two or more years of preparatory nature may be provided. The age-grade scale presented in this report outlines it for the 10 years with the two preparatory classes added.

Now, Dr. Pintner was speaking to-night of the mentality, the mental ability of those he has examined. Don't forget that he is referring to their mental faculties in combination; that is, to their general intellect, or, to use what is a better and more expressive term, to their mental capacity—and not to their native intelligence alone. In the former is included not only the native, or hereditary, endowment of intelligence which must act as the potential for other things, but also those other things which go to make up the mental ability,

as we commonly view it—memory, volition, will power, and experience. And it is this complex that is usually measured in these tests; but if we find in these tests with a great number that certain groups or certain ages measure up higher than do other comparable groups and ages, it is reasonable and safe to assume that those who measure the higher possess a greater degree of intelligence than do those who measure lower. In other words, it is reasonable to assume that intelligence is a fixed intangible quality given by nature.

It is my belief, whether you agree with me or not, that intelligence of itself is never increased one iota, if you live to be a thousand years old, and with all the educational training possible. You come into the world possessed of a certain degree or amount of intelligence and go out of the world with that same degree or amount, having transmitted the same to your offspring. But with this intelligence, which may rank 15, 20, 40, 60, or 80 per cent with 100 maximum—with this intelligence as a potential you develop a performance level, the tangible expression of intangible intelligence indicating degree of educational advancement through experience, memory, physical growth, and sex, culture, and normality attainments. You will transmit to progeny the intelligence less the later attainments (eugenics or nature) which, however, when high will be reflected in the progeny through association (euthenics, or nurture).

In making the examinations in the four schools, giving first the digit-symbol test and then the symbol-digit, it was found upon comparison by Dr. Pintner that the general results of the two tests in each of the four schools showed a very high degree of correlation. These examinations were later published by Dr. Pintner (and to be considered as part of the report of the efficiency committee) in pamphlet form of 75 pages with a large number of graphs and full explanatory text, which should be in the hands of every teacher and student-teacher. It was because of findings in that series of tests that I suggested on my hands to the Doctor while he was talking to-night—he is getting to be a pretty good "signer"—that instead of two years' retardation, it was three or four years, as we found then. I think he stated in his book it was three years; anyhow, in locating the mean he got it over in such a position that it fell into the third year, which probably carried it well along between the third and fourth year; and it was upon that finding that the age-grade scale which we have presented assumes as the normal age for the first primary grade 10 years. That is, the child is regarded as three years retarded, which is not because of degenerative processes, but simply because of his isolation and silence and because of which he has not been able to communicate with the rest of the world, as his more fortunate hearing-speaking brother has done.

And this point of retardation suggests another thing, that in the development of instincts and temperaments, a most important thing to be considered by the teacher, we have only one comparison to make and that is with the instincts and temperaments of the hearing child, but when we begin to make that comparison with the hearing child we find no absolute agreement between various writers as to the periods of the development, or the functioning, of these various instincts and temperaments. So we are trying to compare with a sort of shifting scale among the hearing, but with the isolation and the

silence ranging from one, two, three, four, five, six, and seven years before they come to us, it is reasonable to assume that the proper functioning of their instincts and temperaments and dispositions is, in some degree, held in abeyance with corresponding reaction.

As to the curriculum, just a word: It is upon native intelligence, conventional or natural retardation, environmental conditions, and the functioning instincts and temperaments, that we should build largely, and rightly if we know how, the curriculum for children, and especially for deaf children. It has been wisely declared recently by an educational commission that teaching is to be judged by developing motives in pupils—by training them to discriminate values—by developing in them the power to organize ideas, and by developing in them the power of initiative. Motives, values, ideas, and initiative—all to be developed in the child and youth, and possible only through efforts incited and strengthened by the promptings of science, knowledge, and precision, each of which should be reflected in the established curriculum based upon the idea of persuasive leading along the natural plane of thought and action of immaturity, rather than attempting to enforce knowledge and culture dogmatically from the viewpoint of maturity.

As Brother Jones has stated the time, I would better stop here now because I may get started on "that hour's journey" that he spoke of. But there is one thing just as sure as that the sun shines—the new method, the scientific method of measurement of efficiency and competency and results in schools is not going to be measured solely by the preparation on the part of the teacher, or by the school equipment, or by numerous other things; but it is going to be measured absolutely in terms of the progress made by the child. Now, I don't mean to say by that, that such preparation and equipment are negligible quantities. It is highly important that the teacher should have most thorough preparation and qualification, that the equipment be adequate, and that there should be plenty of money available to carry the school work into successful effect. But don't get away from the fact that the demand for the new scientific measurements is upon us and we must submit to it whether we would or not. I feel that when we comply with the new requirements we shall not only be willing to be judged by them but that we will welcome them.

In conclusion, I regret that I am unable to speak more in detail concerning the important subjects so briefly referred to, but these, with many others closely correlated, are fully considered by me in the report of the committee "Standardization, efficiency, and heredity." I thank you.

Mr. JONES. We have with us this evening a new man to this profession, although well known throughout the educational world generally, Dr. Edwin B. Twitmyer, of the department of psychology of the University of Pennsylvania. We shall be glad to hear from him.

Dr. TWITMYER. I am moved by some three impulses at the present moment. In the first place, I want to express my extreme interest and appreciation of Dr. Pintner's presentation; in the second place, I want to tell you that I am not much at making a speech when I hear an orchestra beckoning me to a dance. In the third place, I think it would be most unfortunate if this audience should leave this

room to-night with the feeling—I don't know that Dr. Pintner meant to arouse it in your minds—with the feeling that there is any absolute measurement of mentality as opposed to an absolute educational measurement. For example, if I were superintendent of an institution at this end of the speckled chart [indicating], where students were doing very much better than they ought to do, I would not be inclined to congratulate myself. It is a very serious question whether you can stuff children beyond their natural ability.

In the second place, I don't think I would be discouraged if I were represented by a dot at the other end of the chart, because as I think over mental tests I keep constantly in mind the wide variation. I also keep in mind the wide variations which we recognize in educational measurement, and it is just possible that the small differences represented at both ends of the chart would be taken up by the variations in these two scales. Now, if the difference is very marked, then I might be inclined to believe that we have a very significant condition, but where the difference is not marked I am sure that I would neither be discouraged at one end of the chart nor would I be inclined to throw out my chest at the other end of the chart.

Mental measurement is a game at the present time. I am not sure any of us know quite where it is coming out. I talked to my friend, Dr. Chance, the other day. Dr. Chance was a surgeon in one of the southern camps, and he told me this story. He was at the receiving station. A burly Negro was brought in, and the man at the desk said:

"What is your name?"

The man replied, "They mostly calls me Bill."

"I know, but what is your name?"

"Well," he replied, "my name is Bill."

"Well, who brought you here?"

"The man brought me here."

"Why did he bring you here?"

"I don't know, sir."

"Where do you live?"

"Back home."

"Where is back home?"

"I don't know, sir."

"Do you work?"

"Yes, sir; I work."

"When do you go to work, Bill?"

"When the whistle blows."

"Bill, when do you stop work?" (That was an easy one.)

"When the whistle blows."

Now, does anyone mean to assert that any kind of mental measurement could be made of that man—certainly, any group measurement? As a psychologist, I would be very, very careful in my statement that I could put a man of that sort on a scale. This gentleman over here is right, the man's performance tells the tale, and Bill's performance three months after the draft into the Army made him a sergeant, but who in the world would have suspected it? That is to say, we have that mysterious thing, native ability; but I challenge any psychologist, any test thus far devised, to have even led the examiners to suspect it for a moment.

At the university last fall we took in some irregular students, Army men, not conditionally prepared for college. We gave them mental tests. Now, I am perfectly willing to admit that those men graded fairly high in the mental tests, and, watched through the year, they did fairly good work; but one or two men at the university were sporty enough in educational matters to admit a few of the very poorest ones on the mental-measurement rule just to see what would happen and they were surprised.

It all comes to this point: We must be extremely careful in talking about a mental-measurement scale as though it were a yardstick. That is the only point that was in my mind to talk to you about. I am sure Dr. Pintner did not mean to leave you under the impression that they were yardsticks; but let us be very careful that we do not even suspect that they are yardsticks.

Mr. JONES. I asked Dr. Pintner last fall to make us some class charts in the upper grades, where the pupils are old enough to feel some responsibility. He tells me he has left those charts on my table and I shall find them on my return. It takes a long time to make them. I was so anxious to apply it to one boy that I fixed an imaginary chart of my own and called him into the office and said: "Here is a dot that shows your intelligence, and down here is a red dot that shows your school work. You are a bright boy. This dot shows it, but this dot shows that you must be lazy or indifferent or inattentive." He caught the idea instantly and said he would do better. I told his teacher about it. She took a great interest in him, and from that day on he went up in his class, and his red spot in my imagination went up, too.

He got work at shining shoes. He told his teacher that he had become bright now; he was smart and was earning some money. He told her that the superintendent is the only friend he had had; he stuck to the boy when everybody wanted to throw him out, and now he was going to shine his shoes for nothing. [Laughter and applause.] If Dr. Pintner never did any more for our school than to give me the idea that I put in practice with that boy he has served our school well.

Dr. R. O. JOHNSON. Before you go on to the next speaker, that point strikes me as to how you used that boy. We had in the Indiana school one time a boy who was a very boisterous fellow, inattentive and anything but studious, and the teacher one day recommended to him that he put on a collar of a different kind, wear it up a little high, and she encouraged him in that, and that boy kept getting higher and higher with his collar until he got a great, big deep one, and his conduct increased in the same ratio as the height of his collar did, and he became a very good pupil. [Laughter.]

Mr. JONES. About a year and a half ago a new man came into the profession. He came to the conference last December and everybody liked him; he seemed to have good ideas; he is on this program to-night, and I take pleasure in presenting him to you, Supt. H. M. McManaway, of the Virginia school.

Mr. MCMANAWAY. Mr. Chairman, in view of the lateness of the hour and in view also of the fact that a conference of superintendents is called to meet after this session, I shall beg leave to print perhaps and defer my remarks until a later time.

Mr. JONES. We shall not open this matter for general discussion, but I did promise Mrs. Anderson the floor for a very brief minute.

Mrs. J. SCOTT ANDERSON. We worked at Trenton this year with Dr. Pintner's scales. There was, however, a difficulty that we met on every side, which he has already mentioned to you; that is to say, his scales applied to the children when they were 7 or 9 years old. By that time a great deal of the damage is done. What we want to try to do is to find such facts as we may use or our teachers may use for our small children. That, of course, must be a more or less individual matter. Those tests are obtainable—the Goddard or the Witmar form board, Healy A and Healy B puzzle, the kindergarten blocks, a number of building blocks, the Witmar cylinders—even the Montessori cylinders may be used. A great many of those have been standardized. Also the picture-completion set.

I believe that teachers from this meeting should go back home with the determination to read up about those things and see how far they can apply them to little children, and I do feel that when we give our tests to our children who have been in school, our 8 or 9 year old children, we should not omit language tests. What is going to differentiate these children from the little animals that have intelligence if it is not their power to use language; and, as Mr. Pope said this morning, most of our schools for the deaf have a pretty well-organized vocabulary for those first years; and I believe that by the time the child has been in school two or three years we should require language tests, and the child who has not used language, a child from whom all initiative has been taken, yet has reached the age of 7 or 8 or 9, will have a poorer mentality than a hearing child. It isn't the native, the inborn intelligence that is poorer; it is merely the fact that the environment hasn't been the same. We have to have language tests if we are going to test intelligently.

Dr. JOHNSON. Further than that, I would like to have Dr. Pintner, before we get off this subject, explain why he has not used these tests with the younger children.

Dr. PINTNER. The tests that I have been talking about to-night are not suitable for young children. I have not used them because they are not very good. Now, you can do a little more with some other group tests that I know of. You can take, for instance, Peck's completion test that we worked with and use it as a test for young children. Presley has worked out a primer scale for elementary children. I have never tried it with deaf children.

Mrs. Anderson spoke about individual tests. Of course, we have a number of individual tests that we can use with young children. I was not thinking about individual testing to-night; I was not saying a word about it. That is another story. I do not differ very radically with Mrs. Anderson; in fact, I think I am absolutely with her in her last statement, that we must have language tests for mentality of deaf children.

Mr. MCMANAWAY. Mr. Chairman, during this past session we have administered at the Virginia School the test which Dr. Pintner has devised, and I went over with him to-day the result of those tests. I have analyzed them very carefully, both the intelligence and the education tests, and while there were some points about which I am not entirely satisfied and about which I found that Dr. Pintner, per-

haps, was not entirely satisfied, the tests which I applied convinced me that, taken as a whole, they are a very satisfactory test of mentality; that the tests confirmed the judgment of the teachers in most respects as regards the mentality of the children, and that they confirmed my ideas about the educational advancement of the various classes in the majority of cases. I have drawn graphs for each test, taken the children by ages—that is, the age group—and then the class groups, and the curves which result are a very interesting study. If time had permitted I had intended to discuss results in my individual school and conclusions drawn, but perhaps I can induce Miss Timberlake to publish those later in the Volta Review.

Mr. JONES. Remember the meeting of the conference. It is an important meeting. If there is no further business we will stand adjourned.

(Whereupon, at 10 o'clock p. m., the meeting adjourned.)

FIFTH DAY, FRIDAY, JULY 2, 1920.

Centennial Celebration of the Founding of the Pennsylvania Institution for the Deaf.

PROGRAM.

MORNING SESSION.

10 a. m. to 12.30 p. m.:
Supt. A. L. E. Crouter presiding.
1. Address, "The Pennsylvania Institution for the Deaf—Her Past and Present Record."
2. Address in behalf of the profession, Dr. Percival Hall, president of Gallaudet College, Washington, D. C.
3. Mr. Frederick M. Hughes, "Thoughts on the Education of the Deaf."
4. Dr. Albert L. Rowland, State department of public instruction, "The Education of the Deaf and Blind as Related to Public School Work."
5. Dr. Charles M. Jacobs, of the Lutheran Theological Seminary, "The Moral and Religious Training of the Deaf."

1 to 2.15 p. m.: Luncheon.

AFTERNOON SESSION.

2.30 to 5 p. m.:
President A. R. Montgomery presiding.
1. Prayer, Rev. Thomas Cline.
2. "The Institution and its Work," John F. Lewis, Esq.
3. "The Founder of the Institution," Rev. James A. Montgomery, Ph. D., of the University of Pennsylvania.
4. "The Alumni of the Institution," Mr. J. Addison McIlvaine, jr., M. A.
5. "The State of Pennsylvania," Gov. William C. Sproul.
6. "The City of Philadelphia," Mayor J. Hampton Moore.
7. "The State Legislature," Hon. George Woodward, M. D.

8 p. m. to 12 p. m.: Public reception and dancing.

MORNING SESSION.

The convention assembled at 10 oclock a. m., Dr. A. L. E. Crouter presiding.

Dr. CROUTER. The meeting will please be in order. Superintendent Jones of the Ohio school will lead in prayer.

Mr. JONES. Great and all-wise God, we come into Thy presence this morning at the close of this one hundredth year of the work for the deaf in the State of Pennsylvania. We come with bowed heads and bowed hearts and humble spirits this morning to thank

Thee for Thy kindness, Thy goodness, and Thy watchful care and direction over this great work during this long period.

We thank Thee, Heavenly Father, for the great hearts and minds that gave of their substance 100 years ago to found this school which has grown until it is the greatest in the world in service to its own and in good influence to others.

We thank Thee for these people, and we pause now to remember them at the milestone of 100 years. We thank Thee for the great hearts and minds and souls who have directed this work during this long period of time.

We thank Thee for him who presides over this school to-day. Be with him in all of his work, in all of his consecrated and devoted efforts for the deaf, not only of this State but throughout the world. Let Thy blessing rest upon him and all those who serve with him.

We ask Thy blessing upon the schools for the deaf everywhere. May the executive officers and those who teach and lead in any way always remember that these children come to us like "lambs led to the slaughter and dumb before their shearers, so they open not their mouths." May we keep in mind that they are in our hands and that we are impelled by every sense of honor and obligation to Thee to render unto them the greatest services within our power.

We ask Thy special blessing upon this school, this great school, and those who administer and direct its affairs—trustees, officers, teachers, and friends.

All this we ask in the name of Thy Son. Amen.

Dr. CROUTER. President Hall has some letters that he will read.

Dr. HALL. Mr. Chairman, I have here a letter from Superintendent L. L. Wright, of the Michigan school:

MICHIGAN SCHOOL FOR THE DEAF,
FLINT, MICH., *June 29, 1920.*

Mr. A. L. E. CROUTER,
Superintendent Pennsylvania Institution for the Deaf and Dumb,
Mount Airy, Pa.

MY DEAR DOCTOR: The purpose of this note is to extend to you my congratulations and good wishes on the completion of the century's work of the Pennsylvania Institution for the Deaf and Dumb. I particularly regret that I am unable to be present at this meeting, but I wish to recall myself to your recollection and to assure you of my continued esteem for both you and your school.

Yours, very truly,

L. L. WRIGHT, *Superintendent.*

One from Dr. Edward Allen Fay, Nantucket, Mass., dated June 29, 1920:

NANTUCKET, MASS., *June 29, 1920.*

DEAR DR. CROUTER: I regret very much that I am not able to be present, as I had hoped and planned to be, at the centenary of the Pennsylvania institution.

This is a great centennial year in the education of the deaf. It is the four hundredth anniversary of the birth of Pedro Ponce de Leon, the first teacher of the deaf of whom we have any authentic record; it is the three hundredth anniversary of the publication of Juan Pablo Bonet's Reduccion de las Letras, y Arte para Enseñar a hablar los Mudos, probably the first book written, certainly the first published, on the art of instructing the deaf; and it is the one hundredth anniversary of the establishment of the Pennsylvania institution.

The pupils whom Ponce taught were, to quote his own words, "children of great nobles and of men of distinction," and he acquired so great riches thereby that he was able to build a chapel for his beloved convent of Oña. The pupils for whom David G. Seixas opened his little school a hundred years ago were

deaf children whom he found wandering, poor and neglected, in the streets of Philadelphia. The Pennsylvania institution of to-day gives free instruction on equal terms to all the deaf, rich and poor, high and low, without regard to race or creed.

I have had the pleasure of knowing the Pennsylvania institution during more than half of the century of its existence. When I became acquainted with it in 1862 the distinguished Dr. Franklin Bache was president of its board of directors and James J. Barclay was its zealous secretary; Abraham B. Hutton, courteous and modest, was principal; the teachers who impressed me most were Benjamin D. Pettengill, Joshua Foster, and Llewellyn Pratt, the last-named of whom afterwards became my beloved colleague in Gallaudet College. At that time it had the reputation of being the most conservative school for the deaf in America. Under your administration it has become one of the most progressive; but it has never forgotten what it owes to the past; it has not been led astray by fads and fancies, nor followed any will-o'-the-wisp; in the many forward steps that it has taken it has always made sure that its foot was planted on solid ground.

To you, dear Dr. Crouter, to the honorable board of directors, and to the esteemed corps of instructors I offer my sincere congratulations upon the good work that the Pennsylvania institution has been doing for a hundred years and the great work it is doing to-day.

Yours, cordially,

EDWARD ALLEN FAY.

Dr. WALKER. Mr. Chairman, instead of the usual applause following such communications I suggest that this whole audience rise in recognition of the fact that we appreciate Dr. Fay, who is a veteran, and whose services in some respects are about to be terminated in the matter of editing the Annals. I want this expression of this whole audience to be conveyed to Dr. Fay, and want him to be told that we do everything in this reverential spirit because of our love for him.

(The audience rose.)

Dr. HALL. Also one from Dr. Bell:

BADDECK, NOVA SCOTIA, *June 29, 1920.*

Dr. A. L. E. CROUTER,
Superintendent Pennsylvania Institution for the Deaf and Dumb:

Very sorry I can not be with you to help celebrate the centennial of your institution. I am just notified of a visit to Baddeck by a committee representing the British Admiralty, and therefore can not leave my office at this time. Kind regards and best wishes for a truly historical meeting.

A. GRAHAM BELL.

Dr. HALL. Also one from Supt. Griffin, in Arizona:

Best wishes from us upon the great celebration of the centennial anniversary. We had hoped to be present, but could not get away.

With deep appreciation of your services to the profession.

HOWARD GRIFFIN

Dr. CROUTER. Members of the convention, ladies, and gentlemen, it would seem proper at this time to pass in brief review some of the leading events associated with the history of this institution, the one hundredth anniversary of whose founding we are met together to celebrate. It would be difficult if not wearisome to your patience to dwell in any considerable detail upon these events, interesting and important as they might prove, and I shall therefore omit all mention of facts not historically important to the student of humanitarian undertakings.

The Pennsylvania Institution for the Deaf and Dumb was founded in April, 1820, and incorporated by legislative act in February, 1821. The Right Rev. William White, of the Protestant Episcopal Church,

the leading spirit in the promotion of most humanitarian projects of the time, moved by the spectacle of the efforts of David G. Seixas, a Hebrew tradesman, to found a little home school for the care of a number of young deaf children whom he had found wandering in the streets, and aided by a number of the most enlightened and philanthropic men of the city, took the first steps to found a permanent school for their better care and protection. The little school thus founded was carried on for a short time in a small grocery store near the corner of Seventeenth and Market Streets, Philadelphia, then some distance from the center of the city, but now the scene of busy marts and thronged avenues. Soon outgrowing the limited accommodations of the little grocery store, the infant school was moved to the corner of Eleventh and Market Streets, where the Bingham House has stood for many years, and again in 1824 to the northwest corner of Broad and Pine Streets, where it remained a prominent feature in the ever-growing demands of the business and residential growth of the city for more than 70 years, when it was again removed to its present spacious quarters in Mount Airy in 1892. These seventy-odd years were marked by numerous changes and steady gain in its material growth and educational equipment. From a small beginning in a most unpretentious grocery store in 1820, it has grown through conservative and careful management to be the largest and best equipped school in the world in 1892, a period of 72 years.

This remarkable growth has been due first to the intelligent and far-seeing management of its boards of directors, always composed of gentlemen of rare ability and sympathetic instinct. Among them have always been numbered descendants of the families that were instrumental in founding the school, and to this day may be found among its managers, member-descendants of those same families who for 100 years have been found ministering to the well-being of the institution, freely giving of their time and thought and means to its successful management.

This has always proven an element of undoubted strength to the stability and prosperity of the school. Political influence has had no voice in its control. In the 100 years of its existence, including the present honored incumbent, there have been but seven presidents, five treasurers, and seven secretaries. A second element of strength as conducing to the steady growth and prosperity of the school has been found in the long service of its executive heads. In the long years of its existence, there have been but six principals and superintendents, David G. Seixas, Laurent Clerc, Lewis Weld, A. B. Hutton, Joshua Foster, and the present incumbent. This long tenure in office of its executive heads, freed from the trammels of outside influences, has also contributed in very considerable degree to the stability and steady prosperity of the institution. It has been said that confidence is a plant of slow growth, and in no form of human activity is it more clearly demonstrated than in the management of eleemosynary institutions.

As evidencing the steady growth and prosperity of the school, allow me to give a few most patently noticeable illustrations: In 1820 the school was housed in a dingy room of a grocery store on Market Street, Philadelphia; to-day you find it occupying exceedingly spa-

cious buildings and grounds in a lovely section of Mount Airy. In 1820 there were 11 pupils and 2 teachers; to-day the school numbers over 520 pupils with a teaching staff of over 75 teachers and instructors. In 1820 there was no attempt in the way of trade teaching and but little systematic work in the way of the mental development of its children, while to-day a well-defined course of mental, physical, and industrial training is provided for all the children of the school. For over 50 years I have been an eyewitness and an active participator in many of these marked changes, and therefore speak from knowledge gained in actual participation. Just a few simple details may interest you: All the teachers in the early days were men; the sexes were always separated in class, in chapel, in dining room, and in recreation—active association of the sexes was never permitted. The classes were large, usually numbering from 20 to 25 pupils. There were no desks, few or no maps, and no facilities for writing with pen and ink; slates, large and small, with pencils, being alone used for writing purposes. In comparison, think of the splendid equipment of this and other schools of like character of the present day. As for books and courses of study, each teacher provided a course for himself, and secured, usually at his own expense, all the books used by his pupils. But little attention was given to trade teaching.

The methods of instruction pursued were as in most schools of the time—sign-language methods. Introduced from France by the elder Gallaudet and Laurent Clerc, they constituted the chief means of communication and mental development of the pupils for the first 50 years of the life of the school. In the classroom chief attention was given to written language, but little time was devoted to arithmetic or other branches of study. This measurably accounts for the undoubted progress that was made by the pupils in the short time allowed for their training, usually from four to six years, during this period.

I have thus passed in brief and fragmentary review some of the leading features connected with the history and growth of the school during the first 50 years of its existence. I would now trespass upon your time and patience while I make some personal mention of the men with whom I was closely associated during the early years of my service to the institution—that is, from 1867 to 1884.

Of the principals under whom I personally served I recall with love and emotion Mr. A. B. Hutton, for over 40 years the executive head of the school, and Mr. Joshua Foster, my immediate predecessor and coworker. Both were educated, refined gentlemen of the old school—scholarly, modest, unobtrusive, sensitive, and retiring in marked degree. As teachers and administrators they were quite, but unusually forceful and devoted to their high calling. They literally gave their all—their time, their means, their thought—to the advancement of the pupils confided to their care and training. As sign makers of the old school Mr. Hutton was graceful, polished, and unusually clear. Mr. Foster was more forceful and more striking in his delivery. Both gave the full measure of their lives to the service of the institution they loved so well.

Of the teachers with whom I was associated in the olden days I would mention with highest regard and affection, on account of their

personal worth and devotion to their work, Dr. Robert Evans, William McKinley, Thomas Jefferson Trist, Benjamin and Amos L. Pettingell, Marcus L. Brock, Jacob D. Kirkhuff, Thomas Burnside, Henry S. Hitchcock, and John P. Walker. All except the last mentioned, who still survives, have long since passed to their eternal rest. I might also mention Laurent Clerc, whom I had the great pleasure to meet during a brief visit to the old school at Broad and Pine Streets, the Carlin brothers, Henry Winters Syle, Philip G. Gillett, G. O. Fay, Warring Wilkinson, Job Williams, Weston Jenkins, Freeman Westervelt, Charles W. Ely, the Peets, and the Gallaudets, Thomas and Edward, and many others with whom I was never closely associated in the work, but whom it was my great pleasure and privilege frequently to meet on social and professional occasions.

As already stated, up to 1870 sign-language methods had been exclusively pursued in the instruction of all pupils attending the school and the time allowed in which to complete their training limited to six years.

In 1870, moved by efforts that were being made in some of the leading schools of the country, the authorities of the institution decided to introduce instruction in articulation and lip reading for such of its pupils (the semimutes and semideaf in particular) as were believed to be capable of profiting by such special forms of instruction.

The sign language and the manual alphabet were, however, retained as being best adapted for the training of the great majority of the pupils, speech and lip reading being taught simply as accomplishments. Prior to this time no attempt of any kind had been made to instruct any of the pupils by speech methods. The experiment was continued for a number of years, with unsatisfactory results. As well attempt to mix fire and water.

In 1881, after a careful examination of the results obtained under pure oral methods of instruction, the managers of the school resolved to introduce that form of training for a portion of the pupils under conditions more favorable than any that had hitherto been attempted. Accordingly, a separate department was established, at first at Seventeenth and Chestnut Streets, in Philadelphia, and later at Eleventh and Clinton Streets, and a small number of children placed under pure oral training. Signs and the manual alphabet were rigidly excluded for purposes of instruction, and speech and lip reading and writing relied on for all purposes of mental development. The results attained proved most encouraging, and after an exhaustive trial of the comparative merits of the two methods, covering a period of 20 years, the oral system forced its way to the front as being the better of the two, and from that day to this has been employed as the sole means of instruction in the classrooms of all the departments. At the present time there are some 520 pupils in attendance, and all are taught by speech methods excepting three deaf-blind pupils, who are taught by means of speech and the manual alphabet.

The teaching staff numbers some 75 instructors classified in 5 departments, the primary, the intermediate, the advanced, the industrial, and the department in physical training, each under the direction of an expert supervising head.

In the academic department the course of study includes thorough and careful training in speech and lip reading, in written language and composition, in grammar, English and American history, arithmetic, algebra, political and commercial geography, physiology, physics, civics, scriptural and moral training, and drawing.

In the industrial department, which has been long an important feature of the school's activities, careful training is given by experts in printing, presswork, and linotyping, in painting and glazing, baking, carpentry, shoemaking, tailoring, stone masonry, bricklaying and plastering, gardening, cooking, dressmaking, plain and fancy sewing, millinery work, and general housekeeping. Our graduates find little or no difficulty in securing remunerative employment on leaving school.

A recent movement by the board, under the direction of a special committee appointed for the purpose, has been inaugurated with the view of eliminating some of the trades now taught and adding new ones should such action be found desirable. A carefully prepared questionnaire is being sent out to all pupils who have left the school during the past 10 years, and to the superintendent and principals of all schools in the country with the view to discover whether any changes and additions should be made, and it is hoped that sufficient data will be received before the opening of school in September to enable the committee to take some definite action on the subject.

In the department of physical training a careful course is given in Swedish gymnastics and in various forms of field sports by highly trained instructors. All pupils strong enough to endure the physical strain of the work are required to take the course.

The department for the instruction of the deaf-blind, though small, is exceedingly effective and interesting. In it are taught, at much expense, three deaf and blind pupils by three highly trained teachers. The instruction of these unfortunate children I regard as a triumph in pedagogy. My highest admiration for the zeal, patience, and unfaltering enthusiasm goes out to those charged with the duty of training these pupils. Through speech and the sense of touch the mental faculties of these doubly afflicted children are aroused and developed to a surprising degree. Their faithful teachers deservedly command the admiration and deep respect of all who from day to day witness the efficiency of their methods and the remarkable results attending their work.

The buildings of the entire plant, which, in addition to the three main residential buildings and an industrial department erected at large expense by a former valued member of the board and dedicated to the free use of the pupils of the school, include a well-equipped heating and lighting plant, an infirmary for the care of the sick, and a cold-storage building for the manufacture of ice and the preservation of perishable supplies, were erected at a cost of considerably more than $1,000,000 about 30 years ago; they could not be duplicated for twice that sum to-day. Their equipment in the way of machinery, furniture, books, and school apparatus is valued at $250,000.

The family, when in regular session, numbers between seven and eight hundred persons. The salaries of teachers and officers, together with the wages of the employees, call for the expenditure of over $135,000 annually.

But complete as the plant is at the present time, there is pressing need of additional equipment. There is need of an auditorium sufficiently large to accommodate large gatherings on public occasions, a well-appointed library in which to store the large number of books now stored in inconvenient places, a thoroughly well-equipped and up-to-date gymnasium, a farm for the production of milk and fresh supplies of fruits and vegetables, and an apartment building for the comfortable housing of our large numbers of teachers, who, by reason of inadequate facilities, are now required to reside off the grounds.

It has been my pleasure and privilege to attend a number of conventions of teachers of the deaf, none I hope more attractive or helpful than this, and I have always found them interesting and instructive. I feel they should be encouraged in every way. Teachers and heads of schools should be required to attend them and to take part in their proceedings. Their expense should be made a charge upon the institution treasury, and ample time allowed in which to attend the meetings. Parents and close friends of pupils should be invited to attend and encouraged to participate in the exercises. Who more vitally interested in the successful management of our schools than the parents and relatives, the real patrons, of our pupils. I well recall an incident that occurred at one of our conventions some years ago, when the superintendent of a prominent school openly declared that parents and relatives of pupils should not be permitted to attend our meetings; that conventions were for experts only, and that outsiders should not be invited nor permitted to share in the proceedings. It is needless to add that that particular superintendent after an unenviable career in several of our schools was long since relegated to a condition of inocous desuetude.

But I must hasten on, I have already too long trespassed upon your patience. I can not forbear, however, making some kindly mention of the large number of pupils that have been benefited by the training and instruction received within the walls of this school since its founding 100 years ago. Some 4,500 have been under its care and have shared in its benefits. Many of them have risen to distinction in their chosen vocations. They have become teachers, preachers, artists, architects, merchants, farmers, and writers, and have led useful and honorable lives in the communities in which they have lived. Time permitting, I would also mention the large number of faithful men and women who after passing a number of years on the teaching staff of the school have been called to act as the executive heads of many of the most prominent schools of the country. To greet them on this occasion, on their return to renew old associations, and to take part in celebrating the centennial anniversary of the founding of the dear old school, is to me a very great pleasure and privilege. I bid them and all of you, of whatever faith and practice, god speed in the blessed work of rescuing and educating the deaf—rescuing them from their ignorance and educating and elevating them to lives of usefulness and honor.

(The convention rose with prolonged applause.)

Dr. CROUTER. An address in behalf of the profession will now be made by Dr. Percival Hall, president of Gallaudet College in Washington.

ADDRESS BY DR. PERCIVAL HALL.

A hundred years have passed since the opening of the Pennsylvania Institution for the Deaf and Dumb. This span of time covers, with the exception of a few years, the history of the education of the deaf in this country. It is well sometimes to pause in the rush and pressure of daily work in order to review a long period in any line of endeavor. Some part of such a period may be discouraging; for real progress is often slow and conditions in any profession at some one time may be unfavorable. We need occasionally a backward look through even a whole century to give the worker of the present day a full realization of what has been accomplished and to give him hope and inspiration for the future.

Certainly we may look back with pride and with congratulation on what has been done for the educational uplifting of the deaf of this country since this great institution was founded. Pitiful indeed was the lot of the deaf child of America in the eighteenth century. No school existed then in America for his instruction. Of all those who must have been deprived of their hearing in that time, as far as we know only three or four chosen ones were fortunate enough to be sent abroad for education. Even after the parent school at Hartford was opened in 1817, the New York school in 1818, and the Pennsylvania institution in 1820, there still must have grown to manhood and womanhood, among the millions of souls in our country, hundreds of deaf children uneducated, untrained in hand, in mind and spirit, whose unhappy lot we can hardly in this day imagine.

Even after the establishment of a large number of our schools for the education of the deaf, the period of time granted for the education of our children was very brief. Institutions were looked upon by the general public as charitable asylums, where unfortunate creatures were to be kept for a period of years and trained as far as possible to make themselves useful.

Equipment and accommodation for children were meager and the provisions for the comfort of teachers and officers were far inferior to those expected by the pupils of the present day. In character, in enthusiasm, and in force, however, the teachers and principals of schools for the deaf in that early time measured up to a remarkably high standard. There can be no doubt but that the advance in the education of the deaf through the century past has been due more to this than to any other one cause.

It may be interesting to follow some of the developments in our schools during that first century of work. We may also compare them with movements in the education of normal children.

At first practically all instruction of deaf children was given in residential schools, where the children spent nine months of the year in large groups, generally sleeping in dormitories, having their meals in one main dining room, and receiving instruction in classes of large size. As time has passed, many day schools have sprung up, especially in the larger cities, where the deaf children may go back and forth from their homes with some degree of safety, and now a considerable portion, especially of our younger children, receive instruction in this way.

Instead of large classes, we find the constant endeavor to reduce the number of our children taught together to a maximum of 10 or 12. Gradually the cottage plan for housing children in the residential schools has gained in favor and is being carried out in new construction, so that more and more our schools have come to the homelike atmosphere.

It is interesting to note, in making comparisons with schools for normal children, how a movement entirely in the opposite direction has in the meantime been taking place, and how the public school has become more and more of an institution. Many hearing children have been found to be undernourished, in bad physical condition, and lacking in discipline. So now they are provided with, or at least allowed to buy, warm and nourishing meals at school. They are given medical and dental examinations in schools. They are supervised at playgrounds in the vicinity of school buildings by trained assistants; and, because it is found that parents will not properly supervise their study at home, it is now planned in some cities to have them remain after school hours for study periods under supervision. So, it would seem that some of the advantages of home life, such as smaller grouping and more personal attention, have been gradually adopted in our residential schools for the deaf, while in our general public-school development the advantages long enjoyed by our residential schools for the deaf, as to proper feeding, studying under supervision, medical

examination, organized play, etc., are being recognized and utilized for hearing children.

The attitude of the public, or at least public officials, toward the deaf and their education during the century past has been slowly but surely modified. In most places in our country it is now realized that the education of deaf children of the State is not a charity, but a necessary part of the State educational work, which should be given to the deaf and to other special classes as a right and not as a matter of charity.

One of the most important principles in the education of the deaf since its very foundation in our country has been the insistence on trades teaching in our residential schools and in our larger day schools. Trades teaching in our schools in the past was highly developed in comparison with the work done in the public schools for normal children. Supplemented by manual training for our younger children, this work has no doubt been one of the chief factors in making our deaf children into independent, self-supporting citizens, whose return to the State in their labor far exceeds all the expense of their education as handicapped children.

Another most interesting development in the work with our deaf children has been the improvement in the teaching of speech and lip reading. This has been so gratifying as to be almost a danger lest we forget what true education is. I do not believe, no matter how much has been accomplished in recent years on the material side of our schools in physical care, in equipment, or in the improvement in attention to speech, that we have been able to find teachers of a higher type than those who instructed our pupils a hundred years ago. Nor can we fail to admire the results obtained by those teachers employing writing, finger spelling, and signs to a large extent with all of their pupils. The written records of the educated deaf men and women of those earlier years preserved in the American Annals of the Deaf and various other publications show conclusively the high standard of thought and expression reached by those deaf pupils of the older time and urge us on to higher accomplishment in the mental development of our children.

It is undoubtedly true that the speech of many deaf children may have been neglected in olden days. Quite likely not enough stress was laid upon the subject of speech-reading. Gradually, through the investigations of our special educators themselves, through the interest of parents and friends, more and more of the school work of our children has been done by means of speech and more time and attention has been given to speech-reading, until now every child entering a school may be sure of a fair trial as an oral pupil. As long as this is done with due justice to mental growth, we are on the right road.

Many other interesting developments have taken place in the hundred years that have just gone by. Our schools have become recognized as educational institutions which should be managed entirely separately from politics. The term of years during which children may remain in school at the expense of the State has been increased almost everywhere. This has made possible the establishment of a college for the deaf in Washington, where the graduates of our State schools may pursue a higher education comparable with that of the smaller colleges of our country and fit themselves to become teachers, chemists, ministers, and professional men and women in various other lines. This opportunity for higher education has been eagerly seized upon by over a thousand deaf young men and women in the past 56 years. Many of them are numbered among the graduates of the Mount Airy School.

Appropriations for maintenance of State schools and of the day schools have been made more liberal and in a number of cases older institutions poorly situated for growth have been abandoned and replaced by complete groups of new buildings modern in arrangement and comfort.

As a result, no doubt, of the World War and the consequent scarcity of labor, the value of the deaf workman has become better recognized. Many large manufacturing concerns are seeking the services of the deaf workman, recognizing that his usual care and quicker sight make him no more subject to accident than other workers, and that his regular habits of life and attention to work learned during his instruction in school make him a far more dependable helper than many who have their hearing.

In this long period of steady development and growth in the education of the deaf, the Pennsylvania Institution for the Deaf and Dumb has played a splendid part. It has been a model in equipment, in management, and in instruction. It has trained for useful life thousands of deaf young men and women from the State of Pennsylvania and many others who have come from elsewhere to take

advantage of the superior work done here. So it is a great pleasure for me, as a representative of the Convention of American Instructors of the Deaf, to join in the celebration of your one hundredth anniversary and to pay tribute to the splendid work that has been done by your board of directors, by Dr. Crouter, and by their predecessors in their able management of this school.

When we gather on such an occasion to rejoice over what has been accomplished in the past and to congratulate those who have worked so faithfully for this accomplishment, it may not seem entirely out of place to look forward also to the coming years with hopes and suggestions for accomplishment in the future.

In the first place, there must be given to the public through the years to come more definite information about the deaf and their education. This should be continued until all thinking people realize that the education of our children is in nowise a charity, but a duty on the part of the State, and that our schools must never be in any way used as political machinery of any part of our Government. They should be accepted by every one as educational institutions for the training of useful citizens.

It is discouraging to find at the present day, after a century's work with our children, how many mistaken impressions as to our schools and our deaf people still exist in the mind of the average person. Our boards of directors, our organizations of teachers, our alumni, our papers published in the interest of the deaf, should seek publicity through every right channel to spread the truth in regard to our work. And may I say in passing that exaggerated claim of accomplishment and the exploitation of phenomenal work on the part of a few of our pupils will be of no real benefit in our work in the coming century.

Secondly, our profession, in order to accomplish the work that should be done, must attract to it young men and young women of education and character. Conditions of work and living must be made attractive for our teachers and officers. It must be recognized that those who take part in any of the school work, coming in contact hour after hour, day after day, with those whom we have in charge, must be people of character and refinement and must be compensated liberally for their important work. Supervisors, matrons, teachers of industry, as well as teachers of academic classes, mold the characters of the children with whom they associate so intimately. In truth, this association outside of the actual study and recitation of lessons is often the more important part in the development of the future man or woman. The school officer must then be put on the social and financial footing of the teacher and both must receive living wages.

In the third place, still more liberal support in a financial way must be given to our schools. Proper school equipment, proper housing conditions, teachers and officers of education and character can not be obtained without such support. Liberal expenditures for the education of youth, if wisely directed, mean increase of production, higher standards of living, and better citizenship for those who are educated.

In the fourth place, we must see in the coming century a further movement in many of our schools toward the further development of the home spirit. This may be fostered by the housing of our children in small groups, with a larger number of housemothers and housefathers, by the provision of books and toys, games and recreation such as the normal child expects to have and does have.

This will mean the rebuilding of some of our older institutions. It will mean the moving of some of them from present cramped quarters. It will mean the expenditure of large sums of money; but it is bound to come. And yet the success of the bringing of the home life and spirit into our schools is not, and never will be, a mere matter of money, dormitories, and small groups of children. There must be in the hearts of the authorities of our schools and their assistants a love for children and for this home spirit, or we shall never find it in our institutions.

The fifth hope that I wish to express is for uniform compulsory-education laws, forcing into our schools for from 10 to 15 years all deaf children of every State. It has already been shown by fairly accurate tests that our children are from two to four years behind normal children in their mental development. Their progress, once entered in school, is about as rapid as that of normal children. They should, therefore, be kept in our schools until they are 18 to 20 years of age.

With this compulsory education of all of our deaf children it will be all the more necessary to employ liberal methods of instruction. In the century to come it will be recognized that each child is an individual. Each is a separate problem. Each must be tested mentally and physically at frequent intervals, and schoolwork and shopwork and play outside of school must be varied to develop to the fullest extent the possibilities of each separate child.

Another problem in the century to come which our schools will meet successfully, I am sure, is the training of the hand. There is no doubt that a large part of the past success of the education of the deaf has come from the comparatively good manual training which has been given to our boys and girls. In the years to come this must be developed still further. The highest grade of teachers and equipment must be provided. Our girls must receive much more training in household management, in preparation of foods, care of children, care of the sick, and our boys must be trained to use the hand and brain together as one.

Lastly, and to my mind most important in the work of the coming century, is the development of our boys and girls as citizens. They must be taught the laws of our country, the principles on which it was founded, their rights and duties as citizens. We must develop in them loyalty, love for their schools, love for their homes, love for their country, and love for their Creator. In all of these things this great Pennsylvania institution and the many other splendid institutions for deaf children in our country will join and work together in the century to come, and though no one of us will be here to celebrate the two hundredth anniversary of this school, we all of us know that the seeds which have been sown by those who have worked here so faithfully will grow and bring forth more good fruit and another day of rejoicing.

Dr. CROUTER. Some years ago a young lad entered this institution from Harrisburg. He was a bright little boy. He passed through this school with honor to himself and to his teachers. After graduating he entered Gallaudet College, where he distinguished himself as a student. I have watched his career with great interest.

It gives me much pleasure to introduce to you, as a former pupil of the school, as a student of Gallaudet College, and as a member of the staff of Gallaudet College, Mr. Frederick Hughes, who will now address you. [Applause.]

SOME THOUGHTS ON THE EDUCATION OF THE DEAF.

By FREDERICK HUGHES.

Mr. Chairman, ladies and gentlemen, the most beautiful road to success and happiness in this Christian world is loving service. It is that toward which all education is rightly directed. It is preached incessantly in the chapels of our schools. It is typified in the countless classrooms, in no classroom better than in that to which those with the handicap of deafness go.

This is my first thought.

It is a thought of gratitude and joy. It fills the heart of every deaf man or woman who attended this great and beautiful place as a suppliant for light and truth. Here they received emancipation from an existence in the realm of darkness of mind and soul.

What a vague, spectral place the world and all that is therein would seem to us were it not for the devotion, the sacrifice, the sublime patience of our teachers. There can hardly be any deaf man or woman who has not had more or less school learning, to the great benefit of all. Therefore it is with a realization, an appropriate appreciation, that the deaf entertain what views they do upon their own education.

Our schools have at their head and direction of affairs men and women who measure up to the full stature of the great plan. They are men and women, earnest, eager, purposeful, with a vision that means glory in the fulfillment to us who can not hear.

The board of directors, the superintendents, the principals, the teachers in schools for the deaf are heroes. The boys and girls who have been to school will attest to it. The superintendent or some particular teacher is their Lancelot, their Sir Galahad, their Hercules, their Minerva.

To the graduates of this institution it is the acme of perfection. There is no flaw. I asked a graduate to which school he would send his little daughter if she were deaf. His reply is characteristic of all those who have received here that light of Milton—

There still lessens
The sorrow, and converts it nigh to joy.

The reply was, "To Mount Airy and Dr. Crouter, of course."
Well might these graduates have expressed themselves thus:

"Once a fair and stately palace
Radiant palace reared its head.
In the monarch's thoughts dominion it stood there.
Never seraph spread a pinion over fabric half so fair."

And each succeeding generation is blessed with having it still here, and having had it for a hundred years.

Institution life is narrow, but "Narrow is the way which leadeth unto life." Surely one would not put a child at the crossroads of life and have him chose his way. Would not one strive to give him first

"His vision of the heavenly light
That sets the faltering footsteps right
And makes the man."

Only in this sense can one justify the institution's narrowness. Perhaps that is all-sufficient. But this limits the mental horizon of thought and action. A lack of initiative is created. There is obtained a uniformity in manners which, however, may be of the very best; a sameness in address and conversation. This produces a shyness in the company of "many men of many minds." The individual may be gradually buried.

Can it be that nature, bowing for the moment to fate, meant those who can not hear to have no great diversity of impressions, to deny us variety, the spice of life? If this can by any chance be the fact, then we have "euchered" fate and bluffed nature, for with the wonderful help of our educational methods we have almost every advantage that accrues to those who possess perfect hearing. Our existence was to be monotonous. We were to work, and eat, and sleep. Yet with your generous wonderful help we have been taught to live. What more can we ask? How much more of your unstinted efforts, your unfailing patience can we seek? We know, thanks to men and women like you, we can go further. Therefore we solicit your continued efforts to lift us still higher, to broaden our vision as far and as wide as it will go. The usefulness of the liberal arts is more difficult to demonstrate, especially to the mind of youth, than is the usefulness of scientific knowledge. The latter is easily conceded, as it deals with material things. The former needs encouragement.

Every deaf child should have an opportunity to climb as high as his skill, his strength, his endurance, and his intelligence will permit. He should not be held back by his less gifted brethern. He who is able to advance should be given every opportunity to do so.

This school has consistently maintained a program of progress for the duration of two golden anniversaries. The personnel of the board of directors show interest and continued confidence in this mission of enlightened philanthrophy. A work is not continued into the third generation unless the results have been very gratifying. No wonder that little crockery store of David Seixas on Market Street has grown into the largest, finest, the best school for the deaf on this earth.

For every such work of Divine Providence there is given an instrument who walks and works among us. How incomplete this centennial would be without Dr. Crouter! The deaf of Pennsylvania owe him a debt which can not be paid in the full. He stands outside the magic circle of satisfactory expression of gratitude; a man, warm and personal, whose guidance we learnt was to be sought, whose understanding of us never to be doubted; a man whose personality and high outstanding Christian character is the ideal of the deaf of Pennsylvania. [Applause.]

Dr. CROUTER. We are fortunate in having with us this morning one who is deeply interested in the education of the children of the State of Pennsylvania, and who was formerly active in the public schools

of the city of Philadelphia. He has been called to Harrisburg to assist in the department of public instruction, ably assisting Dr. Finegan, chief superintendent of public education.

It gives me great pleasure to introduce Dr. Albert L. Rowland, of the State department of public instruction, who will speak on the education of the deaf and blind as related to public-school work.

Dr. ROWLAND. Dr. Crouter, ladies and gentlemen, I have had the pleasure of knowing and admiring Dr. Crouter for a number of years, and it was, therefore, with peculiar pleasure that I listened to the brief historical address which he has just made, and which seemed to give a setting to him and to this occasion. I am very sensible of the great honor which is mine in being able to represent at this time the Pennsylvania department of public instruction, and to be the personal representative of Dr. Finegan, the superintendent of public instruction, on this very felicitous occasion of the one hundredth birthday of this school.

The history of public education has been an interesting evidence of the slow growth that has come in the sense of responsibility which the public has felt toward this most important of its functions. Originally education was thought to be a purely private and personal matter. Parents were themselves charged, by their own sense of responsibility to their children, with such education of those children as they chose to provide; nor was it thought to be the function of the community as a whole to care for any such matter. Gradually, however, farsighted men made evident the value of education to such an extent that it became recognized as an asset to the State as a whole. There then became established institutions for educating such children as were unable through the economic situation of their own parents to be otherwise educated. It took a long while to recognize the fallacy of that discrimination between the privately educated child at the expense of his own parents and the publicly educated child at the expense of the State. There seemed to be in the minds of everyone the thought that a child must prove his indigency in order to be worthy of receiving any instruction at the public expense.

It has always seemed remarkable to me how long it took men to realize the weakness of that arrangement. We have countries in the world that are still facing the problem to-day. Until immediately before the war England was laboring under the old notion that the board schools maintained by the public should be attended solely by those children who were unable to provide the means of education elsewhere. Obviously the persons of finest fiber, of pride in their own worth, made every possible sacrifice in order to avoid such a classification, and the State was failing to do the very thing which it was recognized it should do in the establishment of such schools.

To-day, of course, we have gone a further step, and it has been a long one, both in time and in distance. We are now providing public education for all children without discrimination and without private expense. This has been done with such success in a great many of our communities that no longer is the private school the better school, as was for many years the case, even after this discrimination was removed.

I believe I can say with all respect to those institutions that have served faithfully and well through a critical and important period in

the life of the human race that the private school is an anomaly which must eventually pass away. It represents to-day an appeal to that natural and human desire for special distinction that so many of us have. We wish to confer upon our own children something that is peculiar and different and better than is bestowed upon children in general; failing to realize that in that wish, we are denying them the finest opportunity of democracy, namely, the chance to work side by side with children of all classes and to acquire a knowledge of the intrinsic worth of all people, irrespective of their social or financial position.

The education of exceptional children has, however, been a laggard in the general progress of public education. I like to think of the deaf and the blind and the crippled, the unfortunates of all kinds—and I am going to make a broad classification here which I know you will not misunderstand, and include in this group the feeble-minded and the tubercular and the undernourished and the foreign—as people not different from the rest of us, whoever we may be. The average, whatever that is, as we know full well, does not exist. An average is a mathematical thing that is erected out of the mass of human experience and is usually not typical of any individual case. I have never met the average man; you have never met the average man; we are all of us peculiar in some way; we are all of us exceptional to some degree; all of us lack certain qualities which we would like to have; all of us have some other qualities which are peculiarly ours and which make us perhaps of most worth in the work which we have to do in the world. And I am sure, as I have listened to Mr. Hughes this morning and to Dr. Hall in his exposition of the methods that are now employed in the education of this particular class of exceptional people who are represented by this institution, that the whole tendency of educational progress is toward the analysis which I am now making; toward the doing away with the too great distinction which has heretofore been set up between people physically and otherwise handicapped and those of us who think ourselves normal. The tendency is to set up an education as far as possible similar to the general education which we give to all, and an education which is ultimately designed to place exceptional people in a place where they can employ their exceptional abilities to the best service of society.

It seems as though the education of exceptional people then has been too long deferred behind the general progress of education as it has gone forward. Originally exceptional people were considered beyond the pale of ordinary consideration. They were ignored, feared, and by warm-hearted and sympathetic people sympathized with to a point of unfortunate sentimentalism, and I know that these exceptional people themselves are peculiarly sensitive to that sentimentality and are peculiarly opposed to its expression, which seems to be the normal method of society's reaction toward such of its members as are exceptional. Tears readily flow at the listening of such an address as Mr. Hughes has just made us, and yet, as a matter of fact, there are many of us who would stand on this platform and make a much poorer address. The articulations which he used were slightly peculiar but were we to listen to a Pole or an Italian, polite and competent and thoroughly normal in his own opinion, who might stand

upon this platform after one or two years of residence in this country, we would understand him with far greater difficulty. [Applause.]

There seems to be no good reason why we should look upon Mr. Hughes and upon his colleagues, upon the graduates of this institution, in any sense as peculiar above and beyond the rest of us, all of whom have, I fear, our strong idiosyncracies and peculiarities, peculiarities which in some cases—I might say in all cases—have closed to us permanently certain doors leading into wide avenues of human endeavor. His door, too, is closed, but it is not necessarily more important or wider than the doors that are closed to the rest of us, doors through which we shall never pass. And as the world goes on in its elaboration of human activity and makes it impossible for any individual to grasp the full measure of human ability and prepare himself for all fields of activity, just so are we forced more and more to a recognition of the fact that exceptional people can find a place just as big and just as important in which to labor as those of the rest of us who believe ourselves normal.

Gallaudet, Facius, Braille, Binet—those names seem to stand out as men who had a vision at a time when vision was lacking in most people, and who labored ceaselessly and with a complete expenditure of their own opportunities, abilities, and time in the establishment of a thing which seemed to most people hopeless. Gradually, through the years that have gone, these men have brought their labor, with the aid of those who have followed them, to a fruition which we are to-day seeing in this wonderful institution. The very fact that this gentleman is standing beside me interpreting what I am saying in the form of signs, and the further fact that with this audience composed exclusively of recent graduates of this school, such an interpretation would be unnecessary, is in itself an evidence of the step which has been taken in placing these exceptional people side by side with the rest of us exceptional people in a world where perhaps the exception is the rule. [Applause.]

The State department of public instruction has come into a wonderful heritage in finding Dr. Finegan for its chief place. He has a wide vision, a warm heart, and a wise mind, and he is bringing to the organization of the educational forces of this great State something that it has never before had. Pennsylvania has heretofore been one of the most decentralized of the States of the Union in its plan and organization of public education. There is danger in too great centralization, but Dr. Finegan has been in a peculiar position to learn of that danger in his association with the great system of New York State, and he comes to us with that experience behind him, with a knowledge of its weaknesses, to bring to Pennsylvania a centralized system which will recognize always the value of local initiative, local responsibility, and which will at the same time be organized to render to every local community and to every local interest the full measure of intelligent and helpful cooperation which every State department should provide. In this scheme of public education Dr. Finegan includes as a part of the educational if you please—not the charitable forces of the State—the education of exceptional people.

The exceptional child, as I have briefly defined him, in all of these fields is coming into his own and will be considered as part of the

great educational family in order that he may ultimately return to society, as some one has recently said on this platform, a competent, able worker, side by side with the rest of us.

The problem is a serious one and a difficult one. It is not so much a problem of finding means and money, of erecting institutions similar to this, because, as a matter of fact, the deaf are better provided for in the State of Pennsylvania than the so-called normal children—far better. In the four institutions that are erected in this State and largely maintained at State expense for the education of the deaf there is contained practically all such persons as need this kind of training. But there are thousands of children in the State of Pennsylvania who are so unfortunate as not to be deaf for whom education is not provided; who are forced to attend school for a brief term of seven months in a wretched, ill-ventilated, ill-lighted, and insanitary wooden building, and who are instructed by teachers who are themselves possessed of an education of no more than the eighth grade of the common schools. Do you realize that in this great country of ours there are 1,000,000 children who are taught by teachers who have never gone beyond the eighth year of the common school? I venture to say that these children, ladies and gentlemen, are the exceptional folks, and if there is to be any pity bestowed or any tears to flow it should be in behalf of them.

The great State of Pennsylvania, acting through its heart rather than its head, has been more generous in its provisions for its exceptional people than it has for those who are possessed of all their faculties, and so we have to face this big problem of first of all realizing that exceptionality, if I may invent that word, is not a thing peculiar, but is something that belongs to all of us and that we must recognize, a responsibility to all people, irrespective of their peculiarities, physical and mental and spiritual; that we must give to all of these people the fullest measure of training which they have a right to have; and this training must be at the hands of the State.

I was very happy to hear Dr. Hall say that he felt we should have a compulsory education law for all the persons in this exceptional group for whom we are particularly celebrating to-day. I believe that public education for the deaf, for the blind, for the feeble-minded, for the crippled, for the tubercular, for the ill nourished—for all of our people—should be required and should be absolutely free.

At this point I want to digress for a moment to regret a sentence which I noticed in the annual report of this institution, in which it said that those of its pupils who would be beneficiaries to the full measure of State aid and who would be put to no expense themselves must make some sort of proof of their indigency. That is unfortunate and should not be. That is a relic of this past sentimentalism that we must rid ourselves of. Education for all of these people must be free, absolutely free. It must be compulsory within certain ages, and it must be available for everybody, irrespective of where they may live within this great State.

That, ladies and gentlemen, is our ideal; that is the thing that we want to bring about; the aim of the State department of public instruction. We are ready to stand back of this institution in the

splendid work which it is doing in every possible way in urging before the legislature larger appropriation of funds; in bringing to the assistance of this institution all the intelligence and the cooperation and the help that we can possibly bring in order that it may function, if possible, even wider and better than it has functioned in the past.

A proper system of education recognizes individual differences of all people; it provides for the man who is to be an industrial the means by which he will do that work well, while it provides for the man who looks to medicine the means by which he may learn that profession and serve the State well; it provides for everyone—it should do so—the opportunity to make the most of himself in the world in which he has to live. Every person, then, should be provided with a place and equipped to fill that place to the fullest measure of happiness for himself, to the largest possible spiritual growth of which he is capable, and to the greatest measure of service which he can render to his generation.

I thank you. [Applause.]

Dr. CROUTER. We are fortunate in having with us this morning one who has been long identified with the moral and religious training of young men and young women. Dr. Charles M. Jacobs, of the Lutheran Theological Seminary, a near neighbor of this institution, is the next speaker. I should like to state before he begins that it was owing to the foresight and wisdom of a former president of the Lutheran Theological Seminary, Rev. Dr. Joseph A. Seiss, who at that time was vice president of this institution, that we had the opportunity of locating right here in Mount Airy, where you now are. I had spent a summer in traveling around Philadelphia and its environs, striving to find a location which, in my opinion, would be best adapted to the work of this school. Dr. Seiss one morning called into my office and asked whether I had been successful. I said that I had not. "Well," he said, "what is it that you want? Perhaps you are too particular." I said, "No; I did not think so; that we needed a location that would enable us to command the Pennsylvania Railroad and its tributaries, the Reading Railroad and its connections; a location that would be of easy access to the city and enjoying water and police protection." Dr. Seiss said, "I think I know the very place you are in search of. Go out to Mount Airy, on the Reading Railroad, walk out Gowen Avenue to Germantown Avenue, and right across you will see a tract of land of about 60 acres. I think you may be able to secure that property."

The next morning I came out. I walked around this tract of land, then a farm in rather a dilapidated condition. I walked particularly down Cresheim Creek, a stream just to my left, knowing that it would be down that stream we should have to have sewage connections.

I reported immediately to the committee that had in charge the purchase of a suitable property. They came out in the course of a day or two; they agreed with my views; they had an interview with the owner of the property, a neighbor just over across the way at St. Martins, the late Mr. Henry M. Houston; and in the course of a very few days the property was purchased. That, in a few words, is how this institution came to be located at this spot. Dr. Jacobs

is an honored member of the same seminary of which Dr. Seiss at that time was the president. He has long been interested in the work of the school and in the moral and religious education of the deaf, and I have very great pleasure in introducing to you as the next speaker Dr. Charles M. Jacobs, of Mount Airy.

Dr. JACOBS. It was just about the same time that Dr. Seiss found for Dr. Crouter the location for this school that he found for the seminary the location which it now occupies, only one block south of this school, on Germantown Avenue. It is a matter of coincidence that the seminary and this institution moved from the city to Mount Airy in the same year—or was it only one year apart?

Dr. CROUTER. We came in 1892.

Dr. JACOBS. In 1889 the seminary came. We had less preparation to make. It is a peculiar pleasure and privilege, therefore, for me to bring to this occasion the greetings and congratulations of the seminary. I feel, however, somewhat like the small boy who got into an argument with one of his playmates. In the course of the argument the said playmate developed a fluency of vituperative vocabulary which filled the small boy's heart with despair. He realized that when his opponent got through there would be nothing more to say, and so after the torrent had subsided he turned around and said: "Aw, go on. All what you say I am, that is what you are and more." [Laughter.] And so all of the congratulations and all of the good wishes and all of the glorious hopes for the future that have been expressed here this morning, those, Dr. Crouter, are mine, and more. [Laughter and applause.]

I have been asked to speak upon the moral and religious education of the deaf. It is eminently proper that the subject of this address should be included in such a program as that which you have been following during the present week. The propriety of selecting the present speaker to treat the subject may be somewhat more questionable. I may as well confess, before you discover it for yourselves, that I have had no experience whatsoever in practical work among the deaf. I appear before you as a layman in this special field of education. In these circumstances I can deal only in generalities. And yet that procedure may have its advantages. For it is, after all, only the generalities which are eternally and universally true, and therefore eternally and universally applicable.

I. I take it, then, that the purpose of the education of the deaf differs in no important respect from the general purpose which all education should subserve. That purpose is to produce men and women who will approximate an ideal of manhood and womanhood. Of course, the educator never sees the process through to completion. The most that he can do is to lay the foundations and strike out the lines for future development. Nevertheless he is always working with a view to the finished product.

His ideal of manhood and womanhood must, therefore, determine the direction and the content of the instruction which he gives. How true that is could readily be demonstrated, if any demonstration were necessary in this audience, by a comparison between German and American systems of education. The German ideal man is—or has been in the past—one who was useful to the State. His education, therefore, was intensive. It aimed to produce the specialist, the man

who in his own narrow sphere was completely and perfectly furnished to do some small piece of work which would dovetail into another small piece of work perfectly done by some one else. The American ideal, on the contrary, has been individualistic. The ideal American has been the well-rounded individual, resourceful, self-reliant, capable of independent action. And American education has reflected that ideal. It has aimed at breadth, rather than depth; at the general development of all the powers of the individual, rather than the perfect development of any one of them.

Our methods of education are the paths by which we endeavor to attain our goal. They are capable of indefinite adaptation to the material with which we have to work. For the material of the educator is the individual student. To be sure, no individual is exactly "raw" material. Before any system of education gets hold of the individual student, the process of education in the larger sense has already begun. His life has already been molded to some degree by influences over which the educator has no control, and a good part of the educator's work must be given to the neutralizing of influences that work in a direction opposite to his ideal.

Here is at least one point at which the teacher of the deaf has certain advantages over the teacher of the normal child. He has smaller adverse influences to contend against. The material with which he has to work is more nearly "raw" material than that which any other educator deals with. The avenues of communication with the outside world have been closed, and the teacher's first task is to open those avenues sufficiently to permit the admission of ideas. There are doubtless limits to the extent to which those avenues can be opened, and that is the peculiar difficulty which the worker in this field has to contend with. On the other hand, the educator of the deaf can unquestionably begin the work of education further back than can anyone whose work is with the normal child.

II. The aim of education, then, is the production of a whole man. In this process moral and religious training has a place which is at least as important as any other. That is putting it very mildly. My own conviction is that it is of supreme importance and above all others. For morality and religion deal with the control of life, and those elements of education that have to do with the direction and control of life are more important than those that deal with mere power. A minimum of power properly directed is more valuable than a maximum of power running amuck. The development of the emotional and voluntative life is certainly every whit as imperative as the development of intellectual perception and manual dexterity.

The fundamental weakness in the American education of to-day is its failure to give adequate recognition to this primary truth. The educator concerns himself with the production of power; he leaves the development of the directive faculties very largely to chance. I do not mean to say that moral education is excluded from American schools, nor do I complain that religious education is not given in the public school. But I do contend that these two elements of education are primary to the development of character, and should therefore have the central place in education. I believe that no one here will contradict me when I say that it is only the fewest schools in

which they have that central place. They are treated, instead, as an addendum, supplement, or appendix to general and special education. They are left to haphazard. If they can be had in addition to all the rest, well and good; if not, the pupil must do without them. I am not here this morning to suggest a remedy for the condition, but I do want to point out the fact that the condition does exist.

It scarcely needs any argument to prove that in regard to this moral and religious education, there is a peculiar responsibility resting upon such schools as that in which we are meeting. The nature of their work demands that the pupils shall be placed under the absolute care and direction of the school during the whole time of their education. They must be out of their homes and away from the influences of the home for the greater part of every year. The school stands to them in very truth in loco parentis. The legal term is more than mere phraseology. The time of this absolute control covers just those years in which the moral and religious ideas of nine hundred and ninety-nine men out of every thousand are permanently formed. It covers, too, that period of awakening, of the opening of the lines of communication between the pupil and the world outside. To fix in that pupil's mind some sort of a definite idea of his proper relation to that outside world and to the God to whom he is ultimately responsible for the conduct of his life, is a duty that is inescapable. My own acquaintance with schools of this nature is confined to the one in which we are meeting, but my testimony that in this school, at least, that duty is not neglected, rests upon more than 20 years of observation.

The giving of that instruction involves many delicate problems, chiefly those of adjustment with home, church, and State, but I believe that the solution of the problems which has here been found is one that is worthy of study and imitation in other schools, and not alone in other schools for the deaf.

III. The necessary limits which this morning's program imposes upon the speakers render it impossible for me to enter here upon any detailed discussion of what the content of this moral and religious education ought to be. And yet I do not wish to leave you with a mere vague impression of what the terms should stand for.

One thing, at least, I want to make very clear: I am not ready to admit that the deaf require a different kind of moral and religious training from that which is given, or ought to be given, to others. The methods by which it is imparted will doubtless be different. It should keep even step with the pupil's mental development, but that is true of all such training. Doubtless, too, it will need, in most cases, to be elementary; but even among the physically normal, it is only the exceptional individual here and there who can be led up to the heights of philosophical ethics or into the intricacies of theological doctrine. I have been told repeatedly by teachers of the deaf that the field of abstract ideas is only for the fewest of their pupils, but a rather long and sometimes rather sad experience of others has taught me that only a very few minds can ever find themselves at home in that field. Indeed, I conceive it to be the great weakness of most religious instruction that it goes too far into the abstract. Jesus never made that mistake. He dealt with the concrete realities.

All moral education deals primarily with two problems. The first is that of self-control. It has to do with the relation of the

parts of life to one another. Education in self-control aims to bring these parts into harmony to establish a unity within the individual's life. The teaching of self-control is the first step in moral education. Without it, we are creatures of appetite, instinct, and impulse, and the development of moral personality is inhibited. This element of self-control enters into all education. It is the aim of the discipline of the schoolroom; it is the chief element in study of arithmetic and or carpentry; it is taught in the gymnasium and on the athletic field. But pupils are not always made to see that in the very concentration of the mind there is a moral quality, an element of right and wrong.

The second problem in moral training is the problem of self-sacrifice. It concerns the relation of the individual to other individuals and to the group of which he is a part. It has to do with the purposes to which the controlled self is directed. Without self-control, self-sacrifice is impossible, and the former is related to the latter as the lower to the higher. The moral training which does not teach one to give up his own rights in a higher interest is defective at its core.

I believe that any careful consideration of these two elements in moral education will lead inevitably to the conclusion that neither is possible without a religious basis. No system of morals has ever grown in any other soil. It is true, indeed, that there are individual instances of totally irreligious men who have conspicuously illustrated in their lives the virtues of self-sacrifice and self-control. Altruism may have a basis in reason as well as in religion, for it is not hard to demonstrate the utility of self-sacrifice. Nevertheless the primary source of motive for both is to be found in religious conviction. An endless destiny for the individual man, a responsibility for the use of power, the existence of a God to whom men are responsible, the possession of a knowledge of what the will of God is, for the individual and for society—these are the convictions that have shaped the moral standards of the world. Those who have not shared these convictions have taken their practical results and made of them conventional maxims, but their source has been religion after all. The removal of religious faith would ultimately reduce the world to the moral level of the German, Nietzsche.

For this reason it is imperative that any true moral education must include religious education also. It must inculcate loyalty to the truth, which is none the less true because it is unseen; it must teach self-respect, respect for self, because self is the handiwork of God; it must have regard to the hereafter, not as a place of rewards and punishments, but as a place of development and growth. In its highest development religious education must teach loyalty to Jesus Christ.

This instruction can be given in all simplicity. It is not necessary to define God in a lengthy series of negative adjectives; nor is it necessary to describe Jesus Christ in the language of the creed of Chalcedon. These things are necessary to the theologian. They express real truths for those whose minds have reached into the realm of abstract thought. But there is simple teaching, which is the broad and comprehensive ground for that loyalty which is religious faith. This teaching dare not be withheld.

IV. Just one word more and I have done. The kind of moral and religious training that I have in mind can not be given in courses of instruction merely. Religious faith is something that we do not get from books, but from people. Moral personality and, above all, religious personality, is created by contacts with those in whom the moral and religious life is highly developed. I was asked a few weeks ago in a public meeting how I should proceed to organize a school for religious teaching. My reply was that my first step would be to look for teachers, for men and women in whom righteousness was an active principle and Christianity a life. I would repeat that statement here as my last word.

Dr. CROUTER. As Dr. Rowland referred to a certain requirement on the part of the institution in connection with the maintenance of pupils under its care and instruction, I should like much for our treasurer, Mr. Evans, to say a few words in connection with that particular requirement.

Mr. EVANS. Ladies and gentlemen, Dr. Crouter asked me to say a word about a statement of Dr. Rowland's which might lead to an unfortunate impression being left with the audience.

The statement was that he saw in the annual report—our annual report—a statement that before a pupil could be admitted to the institution his parents must give satisfactory assurance that the parents were not able to furnish the financial support for the child. That is in the report and it is one of the requirements of the State, and I think it would be well if I just said a word in regard to the presence of that requirement and with regard to the fact that such a thing is still required by the State, as it represents the remains of an old spirit and idea which fortunately we are departing from. It used to be—and in many respects it still is the case—that in regard to the State support for this institution and for other institutions like it, the State regards it as a matter of charity. Our institution at the present time gets its funds from the State in exactly the same manner in which the charities of the State get their funds from the State.

The funds are appropriated originally by the appropriation committee, and we go up with all the other charities, good, bad, and indifferent, of the State, and scramble for what we can get from the appropriations committee. And that is one thing that we hoped very much would be changed, and I am sure that the Department of Education, as it is now organized, is going to assist us a great deal in having that changed, because it is not the correct method of looking at the subject of the education of the deaf at all. We should be regarded as an educational institution; we should be regarded as part of the educational system of the State, and we should no more be required to obtain a statement like that from pupils than the public schools should be required to do that when the children of the State are educated at public expense.

Dr. Rowland I thought was going to tell a story, and I suppose he did not tell it because it is so old, but I am going to tell it anyhow, about the Quakers—the two old Quakers who were talking together, and one old man said: "All the world is queer except thee and me, and even thee at times is a little queer." [Laughter.] I thought the doctor was going to tell that.

Dr. ROWLAND. It is very appropriate, Mr. Evans.

Mr. EVANS. But I am sure that from now on we are going to receive such assistance from the State department of education, such increased interest and increased assistance both in our problems, in our educational problems and also in our financial problems, that we can definitely be placed in the category of a part of the educational system of the State, and I might say that I know that the governor and the attorney general are most interested in that and appreciate that thoroughly. We have recently had occasion to find the spirit of the attorney general in that respect in regard to an attempt to enforce some very old and obsolete legislation which was based on the idea that we were a charity and not an educational institution, and as soon as it was brought to the attorney general's attention he immediately advised his department that that was not the correct construction to put on it. So I know that the governor and the attorney general are quite in line with our thought, and in the proposed amendment to the constitution there is a provision to the effect that the institutions for the education of the deaf are part of the educational system of the State.

I think Dr. Crouter thought that a statement ought to be made so as to make sure that no one would believe that the institution had a requirement of that kind in regard to its pupils, and also to show that the spirit and the idea that that statement indicated on the part of the State is recognized by everyone as an obsolete idea, and that we hope that we will have the assistance of the department of education in entirely eliminating it from our financial relations with the State.

I am glad to have had the opportunity of making this statement.

Dr. CROUTER. I wish to state that the centennial exercises on the part of the board will be held this afternoon out of doors, the weather permitting, and I think it is going to permit it, on the east side of the girls' wing. You will find chairs there, and I think it will be a much more comfortable place in which to listen to the addresses than is this chapel. We are promised the presence of the governor of the State, the presence of ex-Gov. Stuart, and other notable speakers.

The exercises of this session are now terminated.

(Whereupon, at 12.15 o'clock p. m., the meeting adjourned.)

AFTERNOON SESSION.

The convention reassembled at 2.30 o'clock p. m., President A. R. Montgomery presiding.

Mr. MONTGOMERY. Anyone attending the sessions of this convention must have been surprised at the marvelous advancement made in the instruction of the deaf and by the large number of people who are interested in that instruction. We must all recognize that great advances have been made in all lines of teaching the deaf. When one recalls that such advances have been made that children who are deaf, dumb, and blind can be communicated with and be made to understand through the sense of touch what is said to them—there are two of them in the hall at the present time afflicted in that way—it almost passes human comprehension. At the same time we must not forget to give credit and full commendation to the foresight of

those wise men who organized the institution 100 years ago on such a broad foundation, and so deep, that it has grown in that time from a school of 10 children, with 1 teacher, to an institution which now has 70 teachers and 525 pupils, and with the most approved methods of instruction. That is a very good growth, I think anyone will admit, to be attained in the course of a century. But I will not go into details; there are others here who have done us the honor of coming to visit us and to say a few words.

First of all, will be prayer by Rev. Dr. Cline.

Mr. CLINE. Let us pray.

O Lord, Thou hast been our refuge from one generation to another, before the mountains were brought forth or ever the earth or the world were made. Thou art God from everlasting. We humbly acknowledge Thee as the Supreme Architect of the Universe, and our highest aspiration is that we may be coworkers with Thee. We realize that unless Thou build the house, O Lord, their labor is but vain that build it; that apart from Thee nothing is strong, nothing is holy, nothing enduring.

We thank Thee, O God, for the great and solid foundations laid by the master builders of this Nation. We believe those men, so valiant in fight, so wise in counsel, were coworkers with Thee.

We commemorate to-day the achievements of those brave warriors, far-seeing statesmen, and incorruptible patriots who made possible and effective the great Declaration of Independence.

We earnestly pray that we, their children, may like them build in accordance with Thy divine plan for the freedom and liberty of mankind.

Have mercy, O Lord, upon this whole land, and so rule the hearts of Thy servants, the President of the United States, the governor of this State, and all others in authority, that they, knowing whose ministers they are, may, above all things, seek Thy honor and glory, and that we and all the people, duly considering whose authority they bear, may faithfully and obediently honor them in Thee and for Thee, according to Thy blessed word and ordinance.

We thank Thee for the solid foundations laid in the great educational institutions of this land, and especially those for the education of the deaf.

As we review the century of history back of the institution for the education of the deaf in the State of Pennsylvania we are grateful not only for the work of its public-spirited and far-sighted founders but for that army of faithful men and women who have labored generation after generation to send forth a multitude of boys and girls trained to overcome their impediments and take their places in the world as happy and useful citizens.

Bless, we beseech Thee, Oh Lord, Thy servant, the superintendent of this institution, who for half a century has been identified with its work. Bless him abundantly, and all those associated with him, the board of directors, the faculty and the pupils of this institution, whether now enrolled as its members or whether they have gone forth into the world, and as this institute enters upon the second century of its history, do Thou guide its affairs and grant it prosperity, success, and achievement even surpassing the years that are gone.

As we realize how from small beginnings these great things have been achieved, may we be reminded of Thy word, which teaches us

not to despise the day of small things, but may we each one in this great period of reconstruction after civilization has been so shaken, strive to build nobly and solidly and in accordance with Thy plan, not of wood and hay and stubble but of gold and silver and precious stones, so that at last when our work is tried by fire we may receive Thy approval, "Well done, good and faithful servant."

Now, to the Father, the Son, and Holy Ghost may there be ascribed, as is most justly due, all might, majesty, dominion, and praise henceforth and forever, world without end. Amen.

Mr. MONTGOMERY. The first address on the program this afternoon is to be delivered by Mr. John F. Lewis, who was secretary for 30 years, and in his work followed his uncle, who was president for 16 years, and his father, who was treasurer for 20 years. I think no one is better able to give an account of the institution and show something of its growth.

ADDRESS BY MR. JOHN F. LEWIS.

Mr. LEWIS. Mr. Chairman, ladies and gentlemen, it was my duty as chairman of the centennial committee, to secure some one to respond to the sentiment of "The Institution," but I regret to report, that after several attempts I have failed, and it is your misfortune that I must make the address myself.

Probably my doing so is not inappropriate after all, because I have just rounded out a service of 30 years as secretary of the institution, and succeeded a father, who acted as treasurer for a like period before me. My knowledge and recollection of its affairs date from my earliest boyhood, and to speak in its behalf is both an honor and a pleasure.

Its history has been so often told and so often printed that it is needless to repeat it now, but there are certain recollections which its foundation awakens, and certain messages its story bears, of which we should be ever mindful.

The first quarter of the nineteenth century, in which the institution was founded, witnesses a distinct awakening to the fact that man is a social being and can not live without regard to the claims of his fellows. It witnessed also a general desire for knowledge and a subsequent marked advance in science and art. In this country especially, that period was characterized by the dissemination of learning, and by the prevalence of open-hearted charity.

Schools and colleges were founded, public and private libraries, scientific and literary associations, hospitals and medical societies, and institutions for the relief of the poor and the afflicted. Just as the last quarter of the eighteenth century marked the development of our political fabric, so the opening of the nineteenth marked the development of our social organization. During these early years of 1800, were founded almost all of our city charities, with a few notable exceptions, such as the Pennsylvania Hospital, the University of Pennsylvania, the American Philosophical Society, the Loganian Library, and the Penn Charter School, and hence the organization of the Pennsylvania Institution for the Deaf and Dumb in 1820, followed as a matter of course, and has the distinction of being antedated only by the institution in Connecticut and that in New York.

Many of the men who united to found it, were connected with Philadelphia's then existing system of free schools, and providing a school for the deaf was the natural outgrowth of this interest. Pennsylvania, under the lead of the Quakers, had taken early measures to provide schools for the education of the young, but the motive which prompted their foundation was that of furnishing free education to the indigent. They were essentially charity schools, the impulse of a noble benevolence, and were supported by the voluntary gifts of contributors. Anyone studying the early history of the schools of the city and State, is at once struck with the fact that charity alone prompted the work, and that every effort was made to run the schools with the greatest economy. They frequently failed for want of support.

The times were hard and money difficult to get. The Lancastrian system was then introduced as a measure of economy. One teacher, through a system of monitors, was put in charge of several hundred pupils, and this system, purely by reason of the saving it effected, continued in existence for many years, until the thought gradually dawned upon the thinking members of the community that education was not a matter of charity or, more accurately speaking, not a matter of charity alone, but necessity, and vital to the existence of the State. It came to be recognized that popular government could not be founded upon popular ignorance, that the schools should eliminate all idea of gratuity or charitable benefaction from their management and place themselves squarely upon political necessity and upon the now self-evident proposition that a good American must be a man who thinks, and that one who thinks can not tolerate any "ism," no matter what it may be called, which seeks to overthrow the basis of our democracy, a thing which means a rule of riot and a rule of ruin.

The constitution of the State provided at an early period in her history for the establishment of free schools, but our forefathers aimed more at making these schools cheap, rather than at making them free. The masters were to be paid such salaries as should "enable them to teach at low prices," a curiously ambiguous phrase which might mean that the masters were to be paid so liberally that they could afford to receive students at a low rate, or paid so small a salary that the resulting charge to scholars was cheap. [Laughter.]

The constitutional convention of 1789–90 amended the old organic law to read, article 7, section 1:

> The legislature shall, as soon as conveniently may be, provide by law for the establishment of schools throughout the State in such manner that the poor may be taught gratis.

In 1818, just two years before this institution was founded, the first school district of Pennsylvania was organized by act of assembly, and the first free public schools were established, supported by the people, by taxation, of which the people themselves were the patrons and to which they were expected to send their children for public instruction, but it was difficult to eliminate from the first schools established after the passage of this law the idea that the instruction they afforded was intended for indigent children only. In fact, it was not until after the act of assembly of 1836 that public schools were established which were attended by the children of the

rich and poor alike and which were designed to afford complete education even to the conferring of a degree should the student be willing to pursue the course to the end.

As was said at that time:

> The stigma of poverty, once the only title of admission to the public schools, was erased from the statute book and the schools were open to every child that draws the breath of life within the borders of the State.

In view of this brief recital we can the better understand and appreciate the provisions of the charter of the Pennsylvania Institution for the Deaf and Dumb as contained in the act of assembly of February 8, 1821:

> Whereas a number of citizens desirous to reclaim the deaf and dumb, of whom there are many in this Commonwealth, to the rank of their species and render them useful members of society, have associated for these benevolent purposes and have opened and supported by their voluntary contribution an asylum and school in the city of Philadelphia, where the children of the rich, for a moderate compensation, and of the poor, gratuitously, laboring under the privation of the faculty of speech, are maintained and educated.

The wording of this charter is quite extraordinary. While one motive which led to the organization of the institution was benevolence, the other and underlying motive was to afford a place where the children of the rich for a moderate compensation and the children of the poor gratuitously could be maintained and educated. In thus founding a school for the deaf youth of the State, irrespective of their wealth or poverty, and where they could be taught together, the organizers of this grand old institution were years in advance of their day, and the impulse they gave it a century ago still continues with ever increasing force.

The first message which the history of the institution brings us, therefore, is the fact that its doors are open to the children of the rich and poor alike. During my 30 years connection with its management, and during the many years preceding that period, from which I have a distinct impression of its affairs, I have never known any worthy deaf child qualified for admission by our rules to be required to stand outside its portals and knock in vain; and furthermore, when those doors have once been opened and the deaf child admitted to the hospitality within, he receives the same consideration whether his parents be rich or poor. He sleeps in the same kind of bed, with the same kind of covering, occupies exactly similar dormitories, wears similar clothes, eats the same kind of food, and in sickness and in health receives the same faithful and devoted care. This characteristic has been continued throughout the entire century of the institution's existence and has been one of the reasons why it has always been supported by contributions and bequests from the benevolent and by appropriations from the legislature of the State.

During the past hundred years the constitution of Pennsylvania has gradually developed from the merest recognition of the charity schools of the eighteenth century, and her legislature never failed to assist the institution to educate hundreds, nay, thousands of deaf children who otherwise would not have been "raised to the rank of their species." The provisions of the State constitution, as amended by the convention of 1789 and 1790, simply reflects the prevailing thoughts of the time, and seems by its language to hesitate to fully accept the proposition that public education rests upon necessity, not

upon philanthropy, and the constitution of 1838 was not much better, but the present constitution, as amended in 1873, and still in force, provides by article 10:

> The general assembly shall provide for the maintenance and support of a thorough and effective system of public schools where all the children of this Commonwealth above the age of 6 years, may be educated.

The first section of its first article says:

> All men are born equally free and independent.

Note that this language is not that all the hearing children of this Commonwealth are to be educated, but all the children, and it does not say that all hearing men are born equally free and independent, but that all men are thus born. Hence the final message which the institution gives us upon the celebration of her centennial is this: Every deaf child in this Commonwealth is born equally free and independent with every hearing child, and is just as equally entitled to be educated at public expense. While the infirmity which nature, accident or disease has inflicted is not possible to remove, it is easy to overcome, and by proper training and education, every deaf child can approach in parity the more fortunate hearing child, and to use the words of the old charter, "rendered a useful member of the community."

The institution asks you to bear this message throughout the entire Commonwealth, and wherever a deaf child is found, announce the advantages which may be here obtained, not as a matter of benevolence or charity, but as matter of right, a matter of self-preservation for the community, and a part of the educational system of the grand old Commonwealth which we enjoy. [Applause.]

Mr. MONTGOMERY. We will now have an address on the founder of the institution, the first bishop of the Episcopal Church of the State of Pennsylvania, by his great-great-grandson, Rev. Dr. James A. Montgomery, of the University of Pennsylvania.

ADDRESS OF REV. DR. JAMES A. MONTGOMERY.

Dr. MONTGOMERY. On such an occasion as this, the centenary of a noble philanthropy, there are many causes inspiring our interest. There is a vital pride in the years lived and the accomplishments achieved, along with the confidence that what was undertaken in a small way a century ago has fulfilled the purpose of the founders, while a future of unlimited bounds still opens before you. There is the interest of the professional, the student of his science, who takes opportunity to review the development of the past hundred years in the work among the deaf and dumb, of which history the story of this institution is a constant index. And then there is the sheer worth of studying what our ancestors wrought, of giving due credit to the founders, of weighing their zeal and faith and love in the days of small things and many obstacles. The conceit of our modern strenuousness and efficiency blinds us to the merits of the past. The success of our amazing machinery makes us impatient of the plodding ways of the fathers. In our great corporations we mark the welding of the units in one harmonious whole; the individual, whether he be a "hand" or a member of the corporation, sinks out

of sight. In this day of vast population and intensive activity it is the mass result alone we observe, personalities sink in proportion.

But when we turn our eyes back to ancient Philadelphia personality stands forth more clearly. We recall some of the great names which have distinguished our city, down from William Penn and through the generation of Benjamin Franklin until we reach the increasing number of scientists, lawyers, divines, educators, philanthropists, who graced Philadelphia a century ago. Most of those men were no greater than men who live among us to-day. But in the smaller community in 1790 the city numbered about 24,000 souls—the individual who made himself worthy stood forth more prominently than he would in the larger mass. And in those days of beginnings there was a field of enterprise and invention which was to be discovered and operated by brave and discerning souls. The units of society, of religion, of education, of philanthropy, were then established which lie as the cornerstones of our modern vast organizations.

We recall spontaneously the leaders of the Colonial and Revolutionary periods and the political masters who forged in this city the Declaration of Independence and the American Constitution. There followed what seems to be, in the histories, a drab age in which democracy was slowly and painfully working out its experiments of a new nation and a new society. It was a dreary springtime, but the seeds were being sown of which we reap the harvest. The return to nature, in which the colonists found themselves, bent their energies to its conquest, and so America boasts of its material inventiveness which has subdued the plains and mountains of our empire and bound, since Franklin, the spirits of the air.

And as well on the social side of life there was the dogged determination to meet the problems of humanity. Separated from Europe, with a sense of responsibility for independent solution of social questions, we find the citizens of old-time Philadelphia taking up without demur their heavy tasks. Then, as now, it was not the mass of the people who wrought but the earnest and intelligent few, rendered the more conspicuous because they were few and pioneers, men of faith and vision when there was no precedent. It appears to the reader of the history of those days that a big man then worked at many big jobs, because there were few to work at them, while the big man to-day must be content to labor at one alone. At all events those who shine forth from those past pages are not diminished in luster through comparison with us moderns for zeal and industry and solid effectiveness.

William White, whom you celebrate as the founder of this famous institution, is an example of the many sided activities which characterized the eminent men of our colonial and early national days. His life covers the latter half of the eighteenth century and the first third of the nineteenth. His father was a typical émigré to the Colonies, the son of a father of good family who had dissipated his fortune. Coming to Maryland as a bound apprentice, he rose through his own efforts and probity to a position of affluence and standing in colonial society. He removed later to Philadelphia, then the metropolis of the Colonies. He was a member of the first board of trustees of the College of Philadelphia, now the University of Pennsylvania.

His son William was born March 24, 1747, old style, corresponding with April 4, 1748, new style. He attended the lower schools of the College of Philadelphia, and then entered the collegiate department, from which he graduated after three years in 1765, gaining from his alma mater the degrees of bachelor of arts and master of arts and later the honorary degree of doctor of divinity. His mind was naturally of a religious bent, and the next five years were spent in theological studies. These were of the solid kind which was the rule in those days, and while they appear to have been pursued without masters he so equipped himself that as a scholar he obtained first rank in the church of his attachment.

As he was a member of the Church of England, it was necessary for him to proceed to the mother country for Episcopal ordination. He sailed thither in 1770 and remained there nearly two years, receiving ordination as deacon and priest. He records his meeting with many eminent men, including Samuel Johnson and Oliver Goldsmith. On his return home he was elected an assistant minister of Christ Church, which parish also included St. Peter's Church, the rector being Dr. Richard Peters and the senior assistant the Rev. Jacob Duché. In 1774 he became a trustee of the college, which, later constituted as the university, he served until his death; he once missed election as its provost by a single vote.

The approach of the Revolution was a testing time to many hearts and consciences. For the Church of England clergy it raised the question of the oath of allegiance they had taken to the King as the secular head of the Church. Jacob Duché served as the first chaplain of the Continental Congress, but later changed his mind, and after Howe's evacuation of the city went back to England and was attainted by Congress. Most of the Anglican clergy followed a similar course. For a time during the Revolution there was not one of them left in Pennsylvania except William White. He reasoned it out that the principles of the settlement of 1689 qualified such an oath, and he threw in his lot with the Colonies, first in their protests and later in their revolt. He never wavered in this resolution, and in his decision he became a tower of strength to the patriotic cause and also to his own Church when it had to shake off its ecclesiastical attachment to the Church of England and stand by itself as an American Church.

With the entrance of the British into Philadelphia in 1777, White withdrew to the family seat in Maryland. While on the way he was overtaken by a courier from the Continental Congress, which had fled to York, Pa., in the darkest days of the war, when Bourgoyne was on his advance. White was summoned to serve as chaplain of Congress. Without hesitation he turned his horse's head and proceeded to York, where his official connection with the Continental Government began. When the British evacuated Philadelphia in 1779, White followed the Continentals a few days after their reoccupation of the city. Duché, who had become rector of Christ Church, had escaped to England, and the parish elected White as its rector. His service as rector of the united parishes of Christ Church and St. Peter's, which included also the later foundation of St. James's Church, lasted till his death, a period of 57 years.

As rector of the Episcopal parishes of the city he became at once one of its leading ecclesiastics. Washington, Franklin, Robert

Morris, his brother-in-law, and many another worthy bowed their heads during his prayer and sat under his sermons. He came into social and official contact with all the notables of the day, and his personality, invested with his sacred office, made him at this early age of 32 one of the leading citizens of the town. An advantage gained so early in years only accumulated in time, and when the days of storm and stress were over and he gained patriarchal age, he became perhaps the foremost citizen, honored for himself and as the link with the honored past.

But his days of greatest activity lay before him. To his wisdom and constancy of character was due the establishment of the Protestant Episcopal Church as an autonomous body. Upon election by the Church in Pennsylvania he went to England and was consecrated bishop in 1787. From that time on he was practically or actually the ranking bishop of his Church, holding this office while remaining rector of those united parishes. His statesmanlike achievements in his Church are a matter rather of ecclesiastical interest. It may be noted that it was due very largely to his principles that the Episcopal Church established for itself a democratic form of government which made it congenial to Americanism. It was this clergyman, rector of the three Philadelphia parishes, presiding officer of his communion in the country, preacher and pastor and theologian, who took his full share in the philanthropies for which our city has always been famous. That his charity was genuine is shown by the fact that in two summers of pestilence which raged in the city he remained at home—when all who could fled—to minister to his flock.

The list of his official connections with the philanthropies of Philadelphia apart from ecclesiastical ones is surprising. We may not think of the duties devolved upon him as purely ex officio out of respect to his office as bishop. In those pristine days of the Republic bishops as such were feared or disdained. Nor was he a seeker of public honors; his natural characteristic, or even fault, was an excessive modesty. In fact, unlike many of us clergy, he shunned general public occasions, and he records that only three times did he agree to preside at a general public meeting, namely, at the establishment of the Colonization Society (which resulted in the establishment of the Liberian Republic), at a meeting in behalf of the Greeks in their revolt against the Turks in 1823, and at another in behalf of the rights of the Indians. In 1827 Bishop White writes that he was president of the following societies, almost all of which exist to this day: The Philadelphia Dispensary and the Pennsylvania Prison Society, since 1786; the Magdalen Society (now the White-Williams Foundation) and the Sunday School Society (undenominational), since 1800; the Provident Society, since 1824; the Philadelphia Bible Society, the first of its kind in the country, as its president from its inception in 1808; and, finally, the Pennsylvania Institution for the Deaf and Dumb, which he served as its first president. His name, which he had earned, doubtless lent prestige to these undertakings, but I judge that the records would show that he served them all with his wise counsels and wide influence. Known as the "Father of the Church" in his own communion, he was the patriarch of the charities of the City of Brotherly Love.

He presided at the first meeting, April 12, 1820, which led to the establishment of this institution. At the next meeting, April 20, he was elected president and continued as such until the day of his death in 1836. On June 15, 1824, he delivered the address at the laying of the corner stone of the institution's building at the northwest corner of Broad and Pine Streets, the structure still so well known to all Philadelphians. It is of interest to note that along with this man who had obtained distinction in the Christian community was associated one who gave the institution its first impetus, a certain David Seixas, "a humble Israelite," as he is called in the history of the corporation.

Your superintendent has communicated to me a story of Bishop White which links him personally with the work among the deaf and dumb. It may be worth retelling. One day at Fifth and Market Streets he found a boy engaged in making sketches on the pavement with the hope of gaining a few pennies from the onlookers. The bishop took an interest in the lad, whom he found to be deaf and dumb. He had him transfererd to the newly founded institution, where the lad's name appears in its second annual report. Whence the boy had come he could not tell; he had left his home with no knowledge of names and verbal communication. But he drew persistently the scenes of his early memories, and finally chance visitors to the institution who looked at his drawings were able to identify his home and parentage. He was an orphan child, born on the Ohio, at Steubenville. The boy grew up, and the generosity of the institution gave him the best education possible in his art. He studied under George Catlin and Bridgeport, the miniature painter. He became an early adept in the recently discovered art of lithography and was unexcelled in that field in this part of the country. His name was Albert Newsam, which name may still be found on many prints, among them one which he made of his benefactor, Bishop White. Such stories as these must be numerous in your annals, but they illustrate in an affecting way the noble personal work done by your founders and patrons and teachers.

Mr. MONTGOMERY. We have the honor and the good fortune and an exceptional compliment paid to us by the governor of the State of Pennsylvania, the Hon. William C. Sproul, who will make a few remarks to you, and I know you will all be glad to hear him.

ADDRESS OF HON. WILLIAM C. SPROUL, GOVERNOR OF PENNSYLVANIA.

Gov. SPROUL. Mr. Chairman, ladies, and gentlemen, I am very glad, indeed, that the distinguished chairman of the board announced that I was only going to make a few remarks. I know if he had said I had to deliver an address, I should have felt very timid about it.

I am happy, indeed, to be here this afternoon in behalf of the State of Pennsylvania and to have the opportunity of participating in these interesting and historic events marking the centennial of this splendid institution. It is a source of great pride to us in Pennsylvania that so much has been accomplished here in the direction taken by the founders of this school and that so much has been done here to help the progress of education of this kind throughout the entire country and throughout the world. I am happy, indeed,

that Pennsylvania, which does not always advertise so well as some others do the good things which she does, has been able to take a foremost part and a leading place in this splendid work.

To-day as I have been here and have listened to the splendid speeches of Mr. Lewis and Dr. Montgomery I could not but think what a monument has been left here by those who founded this institution. How much better it is, rather than to do things which may bring glory or fame for the moment—how much better it is to build lasting things not of bronze or marble—for those things go away as all other perishable and transient things in the world go—but to build here in the hearts of the people and for the usefulness of the people and of the State a great institution of this kind. It really is a very inspiring sight and a very inspiring experience to be here to-day. It has touched my heart deeply to see the splendid work which is being done here and to note the devotion of these teachers, of this splendid man who for half a century has himself been identified with this work and who to-day is an outstanding figure wherever this work is known, all through the world. [Applause.]

I want you to know and I want him to know that the authorities and the people of Pennsylvania are very proud of him, and that they congratulate him and congratulate those who have been identified with him in this work, and that they are glad to be able to work with him in the work which he is doing. [Applause.]

We are in great times now, in great times of development throughout the country, in great times of development in the State. We are faced with a great many serious problems as to how to carry out the things that we must do with the means at our command.

One of the things which has given me the greatest concern during the time in which I have been charged with the executive duties of the State government is the matter of our public educational system, from the primary schools in the most remote rural districts to the highest institutions of learning and the special institutions of which this is one of the most noted. The question of the proper support of these institutions, the question of the proper compensation of those who have given their lives up to that work, and the question of maintaining these schools and developing them, of making them what they should be—a credit to the State of Pennsylvania—has been one of the gravest concerns which we have had. But we are going to work it out; we are going to bring Pennsylvania's schools and Pennsylvania's institutions up where they should be in this great Commonwealth, the very best in all the Nation. [Applause.]

I congratulate you all upon this happy occasion; I wish for you, those of you who are students, those of you who are alumni, those of you who are teachers, and those of you who are trustees, all success in your work and renewed devotion that you may go forward and do better things even than you have done in the past in this great cause.

I thank you. [Applause.]

Mr. MONTGOMERY. The institution is primarily a Philadelphia institution, but its chief support is derived largely from the State. Gov. Sproul has just told you of the necessity of maintaining it, and now we will hear with great pleasure from the gentleman who has taken much pains and considerable trouble to come from the numer-

ous occupations and busy engagements that he has to address you to-day.

I have the pleasure of introducing to you Gov.—I should say Mayor—Moore, of Philadelphia. [Applause.]

ADDRESS OF HON. J. HAMPTON MOORE, MAYOR OF PHILADELPHIA.

Mr. MOORE. Not yet, ladies and gentlemen [laughter], but I certainly thank Mr. Montgomery for the compliment. [Laughter and applause.] I have been sitting here between two great governors, both handsome men, and wondering how it might feel to occupy the shoes they wore, the past and the present, and the present almost President of the United States. [Laughter and applause.] Worthy to be but not quite. [Applause.]

It is a pleasure to welcome to the city of Philadelphia the good men and women from other States who have come to Philadelphia to-day to join in the celebration of the one-hundredth anniversary of the Pennsylvania Institution for the Deaf and Dumb. It is a very great satisfaction as mayor of this great city to speak in words of commendation of those who are devoted to the cause that is here represented, whether they hail from South Carolina or Utah or whether they come from the northern or the southern tier of States or from Canada, our neighbor across the way. You are all engaged in a great moral, a great civic, and a great humanitarian work, such a work as the governor does well to say should be encouraged by the State, and such a work as the mayor in his brief experience of six months in official life, is prone—is compelled to say—is of vast importance to the municipality.

No one knows just how much distress there is in the world. Sometimes there are those who do not care. We are grateful then for those who do care, who pause, who think of others, and who are willing to give their time and their means and their personal service to aid those who are not so well to do or not so fortunate as themselves. A great civic work, truly, because in a municipality we have many men and many women of many minds, of many degrees of intelligence and willingness to help.

Mr. Lewis was reading of our being born free and equal. Yes; but we know that there is a string to that in our every-day experience when we come in contact with those who are intellectually our inferiors or intellectually our superiors, and we know that no real limitations can be set upon, nor can any statute fix the extent of our mental powers. Some of us may be strong and some weak, and therefore it is well that those who are strong should be considerate of the weak, yet we are drifting into times when some of us are inclined sometimes to suspect that the strong are disposed to ignore the weak; to permit them to work out their own destiny whether for good or ill.

A great moral work this is, surely, because there are those who are weak, those who do not possess all the faculties of the strong, who are inclined to drift, and sometimes into channels that do not make for civic welfare but that challenge it.

So we commend the civic side of the great work inaugurated here 100 years ago in an institution, the third of its kind in the United

States, as I was told a moment ago by Dr. Crouter. The doctor told me that the first was instituted in Hartford, Conn. Those Yankees always had a clever way of doing things, and they usually got much of their material into the textbooks long before we did in Pennsylvania, though we were first in most. [Laughter.] And the second was organized in New York, a city that is well and ably and handsomely represented here to-day, but which was "not much" when we passed the Sabbath laws in 1794, laws with which the mayor of the city has had to deal to-day as if they met modern conditions, about which we shall say little on this occasion, having said much elsewhere. [Laughter and applause.]

And though we may give New York the credit of having instituted the second organization of this kind for the care and education of the deaf and dumb, we may still claim over here in Philadelphia, where we still hold as the heritage of the Nation Independence Hall and the Liberty Bell, all the scenes of the Declaration of Independence and of the Constitution of the United States, which we all observe and respect and revere, we still must say upon this occasion to our handsome, our intellectual, and our devoted friends from New York that they were not very much upon the map when Philadelphia itself was the first municipality of the United States. [Applause.] Although we may concede this afternoon that Hartford was first, due to Yankee ingenuity, and that New York was second, due to accident very largely—the construction of the Erie Canal, which came down the Hudson River put New York City on the map—Philadelphia is still first in all the great patriotic essentials and is really the mother of patriotism in the United Staes.

Now, please don't go away, any of you from other States, feeling that we are a bit boastful. [Laughter.] We will admit being third in the matter of this institution for the deaf and dumb, but we claim to be the largest institution of the kind in the world [laughter and applause], and this we hope will make up for our having been a little slow in sending the first Dr. Montgomery here to become the president of the institution 100 years ago to-day, or yesterday, whenever the actual day was.

Now, apart from these little historical impedimenta, this is also humane work, truly, in that somebody still cares for somebody else; and though we may have changed muchly since the days of which Mr. Lewis spoke, and from which he has collated a few bits of evidence that are put between quotation marks, all historic and interesting; though we may have become more of a dancing age, and more of a baseball age, and more of a profiteering age, and more of a moving picture age, and more of an automobile age than we were back in 1820, when this institution began, we still do not forget the human side and we are willing, though we may know more now than they did then, may be more intensive in our industries and our activities, may take greater profits now and be a little more selfish in some respects than they were then, because of our congestion and the increase of our population and necessities, we still may lift our hands to high heaven and thank God that there are self-sacrificing men and women willing to stand at the head of these institutions and support them; and still men and women here and elsewhere who, though labor be scarce, who though the positions be few, who though the opportuni-

ties may sometimes be great in other lines, are willing to make the sacrifice and still linger here amongst those who need assistance. It is not altogether the helping hand in the popular sense but the hand of guidance, the educated hand that makes these motions, as my friend the interpreter is making them now—as these women interpreters have done; to make clear to the understanding of the afflicted. We should be grateful for these devoted men, these devoted women, these teachers who are willing to stand with their fellow men and fellow women in order that the human side of many of our great problems—and this one in particular—shall not be neglected.

To those of you who may come from afar, though you may come from States that are not so attractive as this [laughter]; though you may all have sprung from our loins—since all good things originate in Pennsylvania, except, of course, those that have their beginning in Philadelphia—we welcome you most cordially. [Prolonged applause.]

Mr. MONTGOMERY. It would seem quite appropriate on such an occasion to hear from the alumni of the institution. Mr. J. Addison McIlvaine, who is an alumnus and also a teacher, has been requested to prepare an address on the subject of the alumni of the institution. It is to be read by Mr. Gruver, who was formerly a teacher here but is now the head of a very large school for the deaf in Iowa. Mr. Gruver will now read Mr. McIlvaine's address.

THE ALUMNI OF THE INSTITUTION.

By J. ADDISON MCILVAINE.

In the midst of this epoch-marking celebration, when, most appropriately, are here gathered together distinguished representatives of the State, the city, the professions, and all walks of life, may I bid you pause for a few brief remarks to be made in behalf of those for whom this school was brought into being, and for whose welfare it has been maintained during the century of its existence?

Pennsylvania may find cause for rejoicing in the fact that, largely through her munificence, this school has been enabled to become what it is—the largest, best equipped, and best organized school for the deaf in the world. Philadelphia may refer to it with pride as one of the foremost institutions within the limits of the city, a city noted for its many philanthropic enterprises.

Our board of directors may derive satisfaction in the knowledge that they are continuing a noble disinterested work which some of their forefathers inaugurated in the long ago, and which has most worthily attained for itself a world-wide reputation. Our superintendent may be justly proud of his connection with the school for more than half a century; first, as a teacher, and then for 36 years in direct charge as principal and as superintendent, and because he has so well continued its progress, to its present high state of efficiency and usefulness.

But much as these gentlemen and those deeply interested in the school may felicitate themselves on this day of days, there are others who enter into the spirit of the occasion with an appreciation and pride that transcends all this. I refer to the deaf themselves, our graduates and former pupils.

The history of the school, as you have just heard it, is an eloquent story of the humanity and justice of the good people of the Commonwealth for those who are handicapped by deafness. What they have achieved in these hundred years toward the alleviation of this misfortune borders on the miraculous.

A hundred years ago those who became deaf at an early age, being consequently mute, were without the ability to communicate by speech; and untaught, they were without the ability to express themselves by writing. They were as in a prison house in their own homes, even though surrounded by their own families and kind friends. Others uncared for roamed the streets, objects of pity to the tender-hearted; objects of derision or victims of heartless cruelty

at the hands of the base and thoughtless. They knew nothing of God nor the ways of man.

To-day many of our graduates are honored men and women of superior intelligence, and educational attainments. Forty have graduated with degrees from Gallaudet College, Washington, D. C. Others have completed courses in high schools alongside those who can hear. Several have attended colleges for the hearing. One, congenitally deaf, recently graduated from the University of Ohio as a metallurgist, and is a member of the American Institute of Mining Engineers. Aside from these a long list of graduates are upholding the honor of their old school by distinguishing themselves in almost every line of occupation.

There are hundreds of former pupils who are numbered among "the forgotten millions," whose names appear neither in the society columns nor in the news of the day. Yet they have earned for themselves the glorious privilege of being independent and self-supporting. They fill positions of trust, honor, and responsibility. They pay taxes, support families of their own, and are respected members of the community in which they live. They have established and maintain, free of all encumbrances, a home for the unfortunate aged, infirm, and blind persons of their own kind without asking for or receiving a penny of State funds. In short, they are just as good a class of citizens as any to be found, repaying to the State manifold the amount appropriated for their education.

A few of our graduates, who have passed away and are deserving of our meed of honor, are—

John Carlin, one of the first graduates, an artist of decided merit. Though congenitally deaf, he produced a considerable number of short poems, some of which were widely published. At the public inauguration of Gallaudet College, Washington, D. C., in 1864, he was the first deaf person to receive a degree—that of honorary master of arts.

Albert Newsam, a waif of the streets, who was one of the first pupils of the institution, and the romance of whose identification makes most interesting reading, eventually became a lithographic artist, whose work until the day of his death was unsurpassed for its finish and artistic worth.

James H. Logan, M. A., an expert microscopist, and the first principal of the Western Pennsylvania Institution for the Deaf.

James C. Murtagh, the first of several graduates to become a teacher in his alma mater, followed by Joseph Mount, Joseph O. Pyatt, Thomas Jefferson Trist, and Mrs. Sophie Knabe Trist.

Archibald Woodside, who was first in charge of a day school in Pittsburgh, which led to the founding of the Western Pennsylvania Institution. Theodore A. Kiesel, B. Ph., one of Dr. Crouter's first pupils, for many years a teacher in the Kendall School, Washington, D. C.; Rev. Brewster R. Allabough, M. A., a teacher of great ability for 20 years in the Western Institution, and later missionary to the deaf in Ohio, Michigan, and Kentucky; John A. Boland, B. A., and Harvey D. DeLong, B. A., honored and efficient teachers of long service in the schools of West Virginia and Virginia, respectively.

Though not the terrible misfortune it once was, deafness is and ever will be a serious handicap. Much as modern educational methods are minimizing this burden, a large portion of the hearing public, still unacquainted with the deaf, regard them as a class distinct and apart from themselves. They frequently rebuff even the best educated of the deaf, debarring them from employment in which, with merely a fair trial, they might readily prove their fitness; and they otherwise make the path of the deaf more difficult.

Not so many years ago a distinguished governor of Illinois was invited to address a convention of the deaf. A hearing gentleman friend of theirs was delegated to meet him, escort him to the assembly hall, and act as interpreter. After being duly accompanied to the platform and having taken a seat, the governor surveyed his audience for a moment and then, turning to the interpreter, inquired, "Where are the deaf?" When assured that all of the 200 or so facing him were deaf, he exclaimed, "Really! They look just like other people."

Two salient facts relating to the deaf seldom brought to the attention of the public are these: The deaf are proportionately more self-supporting than those who can hear, and the ratio of deaf persons who have pursued a collegiate course is greater than that of those in possession of all their faculties.

The real worth of a school in its last analysis is to be determined not by its large enrollment, not by its athletic record, nor by what it teaches, but by what its teaching has made of its students. Hence this brief record of what those

who have passed through our halls have done, are doing, and can do. We hope we have made it sufficiently evident that the institution has justified its founding, its fulfilling, its noble purpose, and is worthy of all the disinterested service, sacrifice, and bounty bestowed upon it by the beneficent people of the Commonwealth.

Mr. MONTGOMERY. As has been stated this afternoon, the institution is largely dependent upon the good services of the legislature. We are dependent upon its appropriations for carrying on our work. We have with us Hon. George Woodward, M. D., member of the legislature and senator for this district. I think he is probably known to most of the residents of Germantown, but not to the strangers who are delegates attending this convention.

ADDRESS OF HON. GEORGE WOODWARD, M. D.

Dr. WOODWARD. An occasion like this can happen only once in a hundred years. To be an invited guest is therefore an unusual honor. I have long been a neighbor of this institution and of its honored head, Dr. Crouter, but I confess I have learned more about it in the last few days that I ever knew before. I never knew it was the largest institution of its kind in the world; that it is the third oldest in this country; that it has commanded the service of the finest of our Philadelphia citizenship; that the management has been a source of pride to old Philadelphia families throughout three generations. Incidentally, I was delighted to learn that my own grandfather was a manager and a vice president of the institution. Perhaps that is the reason for my invitation. If so, I am grateful to him and proud that his name is in such good company.

The students of the institution, especially the younger ones, are a familiar sight in the neighborhood, marching as they do in procession in charge of a teacher. They have marched through my own property for years and always behaved themselves perfectly. I have on this account walked or ridden through their property when the value of the short cut became rather tempting. On one occasion the caretaker halted me and ordered me off the grounds. I meekly obeyed, but thereafter entered into a gentleman's agreement with Dr. Crouter that we would always exchange the courtesies of the properties in the future.

The reformer is apt to say, "Whatever is, is wrong." The prosperous, kindly man of affairs is apt to say, "Whatever is, is right." The politician says, "Whatever has to be, I am for." The politician's embarrassment is to know how soon he must be for it.

As a reformer I am inclined to feel the State's relations to defective, dependent, and delinquent children is all wrong. As a friend of Dr. Crouter's and this board of managers, I am inclined to feel everything is all right. As a politician I can see and hear many things that convince me we shall have changes for better or for worse in the near future.

If you read Dr. Crouter's last annual report, you will find a paragraph that probably occurs in all the annual reports of all our institutions in this year of grace and high cost of living. The paragraph says "under such conditions it was hoped that the State would come to our relief by granting proportionately increased appropriations for support, but only partial recognition of our necessities was granted

and the school will be seriously inconvenienced for means to meet its pressing needs during the next two years. Our cost per capita per annum has been $434; we have received from the State a per capita allowance of only $350."

This quotation from Dr. Crouter's report opens the door to the whole question of State aid and State management of its wards—defective, delinquent, and dependent.

I take it for granted that we all agree that the State is responsible for the welfare of these dependents. The day of the weakest going to the wall and the survival of the fittest is past and over. Modern society believes in the conservation of its man power. Modern society also believes that its biggest asset is the child. Most of us adults are past praying for, but every hope that springs eternal lies in the future of the child.

Nothing, therefore, is more deserving of the best thought of our age than the care of children. Shall the care of children—dependent, delinquent, and defective—be turned over body and soul to the State? My reformer friends say, "Yes." Shall the State put up the money and the citizens take a hand in the body and soul? The managers of this institution and many other child-welfare organizations say, "Yes." Shall the citizens do it all? Only a few wealthy, generous, and prejudiced against the State friends say, "Yes." More often they say, "Yes," but fail to put up the money year in and year out.

In the revision of the State constitution, Article X, you will find an amendment which I believe is acceptable to all the commissioners, viz, the general assembly shall provide for the maintenance and support of a system of public schools wherein all the children of this Commonwealth may be educated, including the care and education of the deaf, the dumb, and the blind. If this provision is ratified by our citizens there will be no doubt about the attitude of the State toward the class of defectives.

The Prison Society would like the same provision for delinquents. The Childrens' Aid Society would like the same provision for dependent children. There are doubtless others.

The principle may be sound, but the practical objection is simply that there is not enough State money to go around. Also there is a big difference between defectives in which case the misfortune is obvious and delinquents and dependents where there may easily be a difference of opinion.

You are all aware that an able and decidedly conservative commission to amend our State constitution was appointed by Gov. Sproul. This commission has devoted itself faithfully to its enormous task. As a result of its own deliberations and the public hearings, 500 amendments have been offered to our constitution.

An impressive indication of the importance of these questions of the relations of the State to its wards in the minds of the commission is the fact that the questions of the State's policy toward the unfortunate citizen consumed more time and provoked more discussion than any other subject considered by the commission.

There was a strong minority opposed to any State aid to institutions not controlled by the State. The minority pointed out that our present policy is unlike that of almost any other State; that it opens the door to log rolling, to political maneuvering, to ine-

qualities in the distribution of State money. If the governor had made me a commissioner I would have joined that minority.

State aid to private charities is a dangerous practice. It introduces every charity so aided into an evil competition for political pull. It discourages local benefactions. Worst of all, it robs Peter to pay Paul, Peter being this semi-State institution and the other 32 State and semi-State institutions whose right to State money no one questions. At every session of the legislature the demands for State aid to private charities increase. The State board of charities and the appropriation committee of the legislature are put in an increasingly embarrassing position. The system has become top-heavy and must fall of its own weight. Pennsylvania is one of five States which still cling to general grants to private agencies as a method of discharging the State's responsibility to dependents. As I said, no other subject gave rise to so much discussion before the constitutional commission. At the suggestion of John S. Fisher, our able banking commissioner, an amendment was offered which meets old objections very wisely. The amendment reads:

> Appropriations for charitable or benevolent purposes may be made to a class or classes of institutions not under the absolute control of the Commonwealth, but engaged in work or service deemed by the general assembly to be for the public good, provided such work or service conforms to such standards of excellence as may be prescribed by law or by an executive agency created by law. Every such appropriation shall be made by a vote of two-thirds of the members elected to each house. Institutions receiving such appropriations shall be subject to inspection by the Commonwealth, according to law, and shall make report to the general assembly, or to such person or persons as it may designate, of the precise use made of such appropriation.

If this amendment is accepted, it will be hereafter unconstitutional to appropriate money to a particular institution.

So long as the old policy continues how can we make the best of it? I believe there should be created a State department of charities and corrections or public welfare. I would retain the present State board of charities as a governing board of citizens, appointed by the governor and serving without salaries. I would then create five bureaus—charity, correction, lunacy, children, and finance. Each bureau would have a paid chief, who would operate under the control of a committee of the citizen board. This would prevent the danger of bureaucratic red tape. There surely must be the heart as well as the head in the administration of charity and correction. The officials are dealing with helpless human beings. I believe the advisory citizen board will insure this necessary human sympathy. The State money would be appropriated in lump sums to these four bureaus. The budget would be prepared by the finance bureau for the whole department according to classes, and the finance bureau must give its reasons for recommending certain amounts for institutions in each class. These recommendations must be approved by the citizen board and passed along to the general assembly for approval. When our amended constitution is adopted these recommendations will go first to the governor to be included in his budget, then to the assembly.

The embarrassing question of how much State money shall flow to private charities is treated as follows—I quote from the bill itself:

> The board shall also prepare and submit to the general assembly its recommendations, with the reasons therefor, for appropriations to institutions within

its jurisdiction not owned by the Commonwealth and to which the Commonwealth does not pay a per capita per annum amount. Such recommendations shall not be a part of the biennial budget.

The bill does not say what anyone can read between the lines, that when it comes to these subsidies to private charities it is making the best of a bad bargain; that so long as the patient is allowed the dope the department of charities and correction will at least measure the drink.

The bill provides for supervision of all agencies, both public and private. Annual licenses are granted by the department to those institutions and agencies measuring up to the department standards. This license feature makes the bill more difficult to pass, but is a vital part of it. Every agency dealing with helpless human beings will have to be as well administered as our institutions dealing with property.

It is not a bill to rip out the old State board of charities. The State board for 50 years has done its best with the limited means ($50,000) at its command. It can not adequately investigate every charity applying for aid nor can it adequately supervise every institution caring for the delinquents, the dependents, and the defectives throughout this great State.

One quotation from a paper read before the children's section of the national conference of charities by the secretary of the Pennsylvania Society to Protect Children from Cruelty, Mr. Wallace, will show the need of better administration:

> In the county in which I live there are 135 different officials who can deal with dependent, delinquent, defective, and neglected children and place them upon public funds for support, and this in addition to the mothers' pension fund board of seven. These officials are of varying degrees of intelligence and are selected for reasons other than child welfare purposes.

I am sure you will agree with me that Pennsylvania ought not rest satisfied with a system devised 50 years or more ago, a suit of clothes which has become badly patched.

That is the bill. I would like to pledge the governor's support. I would like to pledge the support of all of you present at this hundredth-year birthday party, then I shall feel that the hundred candles on the birthday cake of this luncheon will indeed be a light to lighten the whole State of Pennsylvania and that this meeting will prove to be the turning point in the administration of our State's charities and corrections. Two amendments which will open the way for this bill or a better one are now before the constitutional commission, viz:

ARTICLE XVIII–E (NEW).

SOCIAL WELFARE.

SECTION 1. The general assembly shall provide for the maintenance and support of a thorough and efficient system of institutions and agencies whereby all those residents of the Commonwealth who, by reason of physical or mental infirmity or other misfortune, are unable to care for and support themselves may receive proper care, relief, and treatment, and whereby every available means may be employed to prevent such infirmities and misfortunes.

SEC. 2. The general assembly shall create or designate a department or departments of the State and municipal government whereby the provisions of this article shall be carried into full force and effect, and whereby all institutions, associations, and corporations in this Commonwealth which undertake to

provide care, relief, and treatment for persons unable to care for or support themselves shall be visited, inspected, supervised, and subjected to such direction and control as shall be authorized by general law.

I can see no inherent difference in the intelligent and faithful administration of our charities and corrections than in a similar worthy administration of our schools, our highways, our health, our forests, our banking institutions, or any other of our ninety-nine departments, commissions, and boards.

My hope and belief is that as Gov. Sproul has gathered round him in the executive departments a remarkably able group of specialists, so we shall find in the future a higher standard of service in our State officials.

In the war a position in the Army, the Navy, or any position in the Federal Government was considered patriotic and praiseworthy. In the time of peace this same feeling ought to prevail. Public service, Federal or State, ought to be reckoned honorable and desirable. Young men ought to consider this public service seriously before taking the line of least resistance which leads to the insurance or broker's or banker's office. If our college-bred men will enter our city, State and Federal service every branch of our public service will be benefited. The moral effect upon the community will be immediate. Instead of the common attitude of suspicion toward anything political, the suspicion will give way to an attitude of respect of interest and patriotic endeavor on the part of every citizen to make his city, his State and his country count for the highest ideals of Government. I have faith enough to believe this elevation of public life is coming . I am sure we can all agree that our State and our city as now administered are proof positive of these nobler aims.

Gov. Sproul and Mayor Moore are both a big encouragement to us who believe that representative Government is not played out; that representative Government as provided in our Federal and State Constitutions have brought our Nation and our States through many storms; that we do no propose to hand this land over to the reds or the pinks or the yellows. We are very pleased with our governor and with our mayor and with their cabinets. There has been a decided improvement in our public service. If the managers of this old institution and their friends in this "City of Brotherly Love," which has never been slow in its devotion to philanthrophy, will use their influence in the legislature and in their communities we shall achieve a real department of public welfare. Such a department will see to it that every State and semistate institution like this is not denied the full appropriation to which it is justly entitled.

Mr. William Potter. Ladies and gentlemen, President Montgomery has asked me to present the next speaker, knowing that we have been connected for many years in the important work of the board of directors of city [Philadelphia] trusts.

Most of you know that the board of directors of city trusts is composed of 12 citizens appointed for life without bond who, together with the mayor and president of councils ex-officio, have charge of all the trusts that ever have been or ever will be bequeathed to the city of Philadelphia beginning with the Benjamin Franklin and including the large Stephen Girard fund.

This gentleman needs no introduction, but in presenting his name, I wish to say that in the care of the 1,600 boys at Girard College I

have ever known him to be vigilant for the best interest of the orphan wards of the city of Philadelphia.

Mayor Moore has just said that he was glad that some men and women were willing to take up work like the instruction of the deaf. I know that the next speaker is not only willing but is eager to be busy in the care of the defenseless. I have often heard him say that of all the honors that have come to him, and he has been governor of Pennsylvania and mayor of the city of Philadelphia, he most appreciates his present position as president of the board of directors of city trusts. I also know that all of us, who have had anything to do with service to our fellowmen appreciate the satisfaction that comes to those who faithfully care for the orphan and the unfortunate.

We realize that when "the supreme moment" comes it will not be the accidental earthly honors that will give comfort, but it will be the thought that we have been permitted to practice here in this life the vital religion of Him who said, "Inasmuch as ye did it unto one of the least of these My brethren, ye did it unto Me."

I present to you one who has thus acted in this world, a man who, when governor of this State, discovered Katharine Frick, of Harrisburg, to be deaf, dumb, and blind, interested the legislature in her case, and helped to secure the appropriation that started her almost miraculous education in this institution, the Hon. Edwin S. Stuart.

ADDRESS OF HON. EDWIN S. STUART.

Mr. STUART. Mr. Chairman, Dr. Crouter, ladies, and gentlemen, I am not on the program to speak here to-day and I want to tell you who is accountable for this infliction on your patience. I received an invitation from Dr. Crouter to come here, and I felt that that invitation was to be regarded as a command, because any request from a man who has done and is doing as much for the human race as Dr. Crouter is worthy of being obeyed whenever he may make it. [Applause.] I am not here as an official; I am here merely as a private citizen; I am here as a citizen of Philadelphia and a citizen of Pennsylvania, to show my profound appreciation of the work done in my native city by the Pennsylvania Institution for the Deaf and Dumb. [Applause.]

Some years ago when I happened to be in Harrisburg I was invited to be present at a great farmers' dinner in Snyder County. There were six or seven hundred people there and I was one of the guests. The chairman of the meeting was a little bit nervous and didn't know just how to introduce me. He wasn't quite sure of the appropriate thing to say. At last he said, "Shall I introduce you now or let them enjoy themselves a little while longer?" [Laughter.] Evidently your chairman on this occasion thinks you have enjoyed yourselves long enough and therefore he has asked me to speak to you.

I am sincerely interested in this work. My friend William Potter, who has rendered great and valuable service in his lifetime, and I know it, told you of a little incident in the life of Katherine Frick. Katherine Frick is a graduate of this institution. When I first saw her she was a child of about 6 or 7 years; she was deaf, dumb, and blind, and knew nothing at all. What to do for her was a most distressing problem. Eventually the Legislature of Pennsylvania

made a special appropriation to provide a teacher for that child, and since that time she has sent me letters written on the typewriter by herself. She has called to see me with her parents, and I do not think the State of Pennsylvania ever appropriated a dollar that did more good than that sum of $1,000 a year for a teacher to instruct Katherine Frick. [Applause.] I do not think that any instructor or any person in any capacity in Pennsylvania ever rendered more service than the faithful teacher who took that child and made her the woman that she is to-day; and I am glad to be here to render tribute to that service.

I am also glad to be here because I believe in the work done by this institution, and I want to say—and I say it in the presence of the governor, without volunteering any advice or instruction or anything of the kind, because he knows it just as well as I do—that every cent that has ever been appropriated for this institution has been to the credit of Pennsylvania, to the honor of the city of Philadelphia, and to the educational advancement of the State. [Applause.]

Now, my friends, I have talked longer than I had expected, but I desire to impress upon you the truth that service is the one thing that counts.

I am reminded of a little story told by Dr. Jefferys, who is the rector of the old church of St. Peters, in Philadelphia. In June, 1919, he preached the baccalaureate sermon to the graduates of the University of Pennsylvania. His subject was "Selfishness," and he told, among other things, this anecdote of a man who had had everything in the world, who had been very successful in business, and had been wrapped up in his vocation and absorbed in it to the exclusion of everything else. Suddenly, after years of toil of that kind, he broke down. He went to a physician; the physician looked him over, examined him, and found there was nothing wrong with him physically. Bodily he was strong and well. The physician knew his life and knew how selfish he had been. He was not a bad man; he was a good man, but he never took interest or helped in anything outside of his own affairs. The physician wrote a prescription, handed it to the man, and said, "If you will go and get this prescription filled, I think it will help you." The patient departed immediately. He didn't look at the prescription, but hastened to a drug store and handed it to the druggist. The druggist opened it, looked at it, and said, "I can't fill that," and handed it back to the man, who then, for the first time, read it. The prescription was this, "For God's sake, do something for somebody else." And that is the important, all-essential thing, and that is what the trustees of this institution, and it is what the teachers of this institution, are doing, and it is what Dr. Crouter has been doing for upward of 50 years. His life work is here, and I consider it an honor to come here as a citizen of Philadelphia and give utterance to that which I feel, namely, that I am glad that you have a man that has lived the life of service that Dr. Crouter has devoted to this institution, and I rejoice that such an instrumentality for good exists in the city of my birth. While I may have no influence, I will speak to the governor and see whether I can help him to help this institution, and I wish to say to him here and now that no institution needs and de-

serves assistance more than the Pennsylvania Institution for the Deaf and Dumb and the directors and instructors who are managing it to-day. [Applause.]

Mr. POTTER. That completes the exercises this afternoon.

(Whereupon, at 4 o'clock p. m., the meeting adjourned.)

SIXTH DAY, SATURDAY, JULY 3, 1920.

PROGRAM.

9 to 10.30 a. m.:

Joint meeting, Dr. Percival Hall presiding.

(1) Paper on "Training of Backward Deaf Children," by Supt. E. A. Gruver, of the Iowa school. Discussion by Dr. H. H. Goddard, director juvenile research work, Columbus, Ohio; F. W. Booth, of the Nebraska school; and Miss Edith Fitzgerald, of the Wisconsin school.

(2) Paper on "Normal Training," by Miss A. E. Jameson, instructor in Gallaudet College. Discussion by Dr. A. L. E. Crouter.

10.30 to 11.30 a. m.:

(1) Paper on "Gallaudet College," by Dr. J. B. Hotchkiss, of Gallaudet College.

(2) Paper on "Preparation for College in English Composition," by Prof. Herbert E. Day, of Gallaudet College.

11.45 a. m. to 12.45 p. m.:

Reports of committees, with resolutions.

Adjournment.

2.30 to 5.30 p. m.:

Excursions to Valley Forge, Willow Grove, Atlantic City, and other points.

The industrial department of the institution will be open daily from 10 to 12 in the morning and from 2 to 4 in the afternoon for the inspection of members.

The convention assembled at 9 o'clock a. m., Dr. Percival Hall presiding.

Dr. HALL. The meeting will please come to order. The morning session is now open.

The first paper on our program this morning is on "Training of backward deaf children," by Superintendent E. A. Gruver, of the Iowa school.

TRAINING OF BACKWARD DEAF CHILDREN.

By ELBERT A. GRUVER.

It is one of the tasks of the educator to set standards. Standards are made by comparisons, for we have only to look back 50 or 100 years to be made to realize that great changes have taken place in the education of the deaf, both in methods and in results. The world moves and acts in a comparative way; so does education. One school is compared with another; one class with another; one child with another, and thus conclusions are drawn and deductions made—sometimes superficial in the extreme. One child is classed as bright, another as backward, and still another as feeble-minded; but no established or accurate test is used to determine the mental status of the deaf child or how its mental condition compares with the normal child under similar circumstances.

It is not the purpose of this short paper to go into the merits of standardization of the schools for the deaf, nor try to establish a norm for the deaf child. However, that phase of the education of deaf children touches so closely the subject under consideration that I can not withhold the suggestion that it is necessary to define terms and establish a norm before we try to fix definite standards. Until we have established, as nearly as possible, a standard of ability for the average deaf child it will be very difficult to make a clear statement of what constitutes brightness, backwardness, or feeble-mindedness. However, when we have set the normal deaf child's standard, if that is possible, it will not be so very difficult to determine the others by processes of elimination and comparison.

This can not be accomplished successfully by simply grouping the results of mental tests without taking into consideration the widely different traits of character in individuals which invariably crop out to destroy the specific traits of each when in the act of making comparisons. An approach must be made that will preserve individuality, differentiate the special traits, and develop a series of standards or norms from different points of view and contact; then group these traits or standards and call the result the normal deaf child.

Can this be done? I am doubtful of its being successfully accomplished; yet so many difficult feats in the education of the deaf have been performed that one hesitates to say that a satisfactory deaf norm can not be established.

When we consider the deaf child in its relation to persons and things, we must acknowledge that we are dealing with something different and out of the ordinary. The physical defect has created an abnormal condition and placed a heavy handicap upon the deaf child, so that it can not be judged and measured by the same mental and physical standards as the normal child; nor can the same comparisons be made; different standards must be set and different processes used in establishing these standards. We must not, in our efforts to establish a deaf norm, lose sight of the fact that the deaf child has a physical defect, and the disease that caused the defect may have created other defects not so easily detected as deafness; so we should at all times be on our guard not to separate the deaf child from its handicap, as we try to determine its norm.

In order that we may discuss the subject from the same viewpoint, it is necessary that we formulate a definition of the backward deaf child. This is difficult, for so many things enter into the "make-up" of this type of child that to say definitely what constitutes backwardness in the deaf child is extremely perplexing; yet every teacher of experience knows exactly what is meant when the term is used. At present we have only our individual judgments to base our statements upon and from which to draw our conclusions. Unfortunately, these judgments and conclusions are as many and varied as there are teachers and pupils.

What is a backward deaf child? For the purposes of this paper, I offer the following definition: The backward deaf child is one devoid of what is commonly regarded as that particular quality of mind necessary to a standard of progress as compared with those about it.

If a deaf child can not measure up to a certain educational standard in a given time, under favorable conditions, when compared with other deaf children under similar circumstances, it is backward.

There are more of this type of children in our schools than we are led to believe by casual observation. One educator of the deaf of wide experience has placed the number of such children in his school at 25 per cent, and a teacher of another large school recently said to me: "Take any 10 pupils of any grade, graded as closely as you may, there will still be a laggard—one who must be urged to do his work, one who must be reminded of his duty and that his lesson is unfinished. He is always a pace or more behind the other pupils in his class."

The training of this class of children should play a more important part in our educational scheme than it does. In many instances they receive scant attention. What the future will bring forth in this respect is hard to say, but certain it is that a larger share of time, more thought, better treatment, and a more important place in the classroom schedule will be given to them, for we are just beginning to know them and have only begun to differentiate the various types and to place them into groups to facilitate instruction. It must be remembered, however, "that education can mold, but not create," and "that such faculties as may be present must be trained to the fullest use of which they are capable, and such aptitudes as are shown should be allowed the freest play."

The hope, therefore, of the backward deaf child lies mostly in the teacher, and it often taxes her ingenuity to the limit to keep the class busy and well occupied while the backward one finishes the same task the others have already finished. If the teacher can not create a desire for knowledge or a fondness for work, then we should look deeper for the cause of the child's trouble. Tregold says: "I think it will be generally conceded that the chief requirement of a living being is the power to maintain existence. Other attributes may be advantageous and desirable—indeed, necessary—but this one is fundamental. The individual who possesses it must be regarded as normal, while the one in whom it is absent or lacking must be regarded as abnormal." So it is with the deaf child. If, however, it does not have the attributes essential to a development which partakes of the character of self-preservation, it is abnormal and must be classed with the feeble-minded, not the backward; for with the backward child is presupposed

the ability to maintain existence, however slow the process may be. A sharp distinction must be made, therefore, between the feeble-minded and the backward deaf child.

Various causes and influences operate to produce backward deaf children; consequently they require special care and a peculiar type of instruction; for in the make-up of these children specific causes lie at the root of the retardation, and special remedies must be applied. When these causes are located and the remedies given, the child is in a fair way to be helped.

Some of the familiar causes of mental backwardness are:

First. Defective vision.

Second. Defective nasal breathing.

Third. Lack of early educational training.

It is also generally conceded that enlarged tonsils and adenoid growth are causes of much of the mental sluggishness in backward deaf children. These causes must be removed or the ill effects minimized by proper physical and mental processes before much can be done to bring the child to standard.

Some of the evidences of the defects mentioned are: Faulty memory, lack of persistence, lack of resistance, lack of thoroughness, and forgetfulness.

Other qualities may enter largely in determining the mental status of the backward child, such as: "Does he engage in competition normally? Does he play the same games as other children? Is he companionable, friendly, and fairly popular with other children?

If the child's happiness and contentment are alone considered, behavior and conduct are of more consequence than mental capacity, particularly from the teacher's point of view; but the teacher soon finds behavior the more important, especially when her comfort and happiness are at stake. The behavior of each child in the classroom and on the playground should be observed and the misfits picked out. A mentally incapable child generally gets along well with other children, but a child whose conduct is peculiar does not get along so well, is hard to teach and train, and, in addition, disturbs the class, if not the entire school.

When these children are understood, the reasons for their conduct analyzed, and they are properly classified as to type, we are in a way to render some educational assistance to them. Some can be made to fit in, some can be given special treatment, and some placed in special classes. The fundamental question is, Does the child fit in? If not, where should it be classed and what is the best thing to do? It is not so much a question as to whether or not it fits into a grade, but whether or not there is a small niche in the school where the child can drop and stay long enough to be proved a fit or a misfit. If it is a complete misfit, a school for the deaf is not the proper place; if it can enter, even slightly, into any of the many and varied activities of the school, there are possibilities for the child. It then becomes a problem of education.

What appear to be the most practical avenues of approach?

First. Thorough and systematic medical and physical examinations and treatments for each child and complete records kept, for by so doing several of the causes and effects as outlined can be removed or lessened.

Second. A complete and definite plan of instruction should be offered and adhered to, thus modifying some of the other obstacles, such as faulty memory, lack of thoroughness, lack of early educational opportunities, and faulty educational methods.

The first is medical and possesses much from which definite results are assured. The other is educational. It is this phase of the work that especially enlists our interest and attention. To remove tonsils and adenoid growths, to care for the teeth and the eyes, are largely external and physical processes, which can be detected and remedied by physical examinations, with the aid of the child itself.

The second is mental. To eliminate faulty memory; to inculcate habits of neatness, thoroughness, and orderliness; to instill ideas of honesty and application to duty, are educational processes, which are the province of the teacher and in the application of which the child can not always lend a helping hand.

I repeat, the hope, therefore, of the backward deaf child lies largely in the teacher. If the teacher can not give inspiration, the doctor can do little; but if the spark of animation is there and the teacher succeeds in fanning it into a flame, then by the aid of the physician much can be done toward the child's development and possibly open the way to the removal of the stamp of abnormality.

There is but one rule that will never fail us, and that is to study to serve the child. School is but a contrivance to help the child, and our plans and programs for the day, in schoolroom and in shop, must somehow yield to the needs of the individual child; for the backward deaf child can reach its fullest mental and physical development only through a well-balanced course in hand-work, developing the mind through the hand, and thus stimulating a desire to see things, to know things, and to do things.

Dr. HALL. The discussion of the subject of the training of backward deaf children will be opened by Dr. H. H. Goddard, director of the bureau of juvenile research work, Columbus, Ohio.

Dr. GODDARD. I don't know just why I should be called upon to discuss this problem. There must be some kind of an illusion on the part of the management, for I know little about backwardness and less about deafness; but I never come to this problem of deafness or the problem of blindness, or any of these special problems and handicaps, without a profound sense of the fact that we have a great unworked mine for investigation, and from my own standpoint as a psychologist I have wondered over and over again why the psychologists have not worked these mines.

Through the courtsey of Dr. Crouter, I did a few years ago come up here and conduct a few tests, and I got so intensely interested in the problem that it just came to the point where I discovered I must either give up my other work or give up this work, and the other work could not be given up just at that time.

From the psychological standpoint, we have in the case of the deaf person, the congenitally deaf especially, the condition of a human being with one large source of information lost. Now, what effect does that have upon the mind of that individual? Those of us who have our hearing can not imagine what the world would be like that did not have the sensation of hearing in it, any more than we can imagine what a world would be like that did not have the sensation of sight. We can not close our eyes and get it; we can not stop our ears and get it, because we know what sight and hearing are, and our memory and imagination supply everything that is lacking. Consequently we have an enormous problem.

I have often wondered, in connection with the life and work of Helen Kellar, what the world is to her, what can it be like? It is not a problem of deprivation; it is not a problem of how much is lacking from the standpoint of the emotional content of life, but it is what kind of a world it is.

You have heard of the fourth dimension; perhaps some of you have read some of the little discussions on the fourth dimension. What is the fourth dimension? We are led to comprehend that there may be such a thing, but we can't understand it. Three dimensions are all that we can comprehend, and the moment you talk about a fourth it is entirely out of our ken. The same way with these people who are deprived of some one or more of the so-called special senses. Why don't we investigate? Why doesn't some one who has been trained on the psychological side try to find out, if possible, what kind of a world it is that these people live in? Now, it seems to me that until we do find out something along that line we can never know very much about the backward deaf child and about the training of the backward deaf child. So, if I might be allowed to offer a suggestion it would be that one of the first things that you people who are interested in this great and wonderful work—one of the first things

you ought to do is to try to persuade somebody who has had the special training to take up the work of investigating this most fundamental problem in connection with the whole matter.

Superintendent Gruver defined for us the backward deaf child, but he admitted that it was a difficult problem.

We don't even know what a backward, normal-hearing child is. We used to make the arbitrary and empirical distinction that a deaf child—backward child—was one who was only one or two years behind his normal age. If he was more than two years back, he was feeble-minded. We now know that that is all gone by. We have gotten way beyond that. We know to-day that there are children who are normal, so far as our mental tests show, that are actually feeble-minded; or, as we say, to distinguish them from the others, potentially feeble-minded. We know that a child may be eight years old to-day and test nine; next year he may be nine years old and test eight; the following year he may be ten and still test eight. So we don't know just what backwardness is.

We may go still further than that. The sad thing is that we don't know what the normal child is in all our work with children. The cause for so much criticism and discussion of mental tests when they first came into vogue was very largely due to the fact that the people who criticized them did not know the normal child. They said, "Why, nobody could do that." Or, of some of the tests, "Why, anybody could do that." Yet the fact was that children of a very definite age could do it, and those a little younger could not do it. But no one knew, and we do not to-day—we do not know the nature of the normal child. If we did, we would have our norm and be able very quickly to measure up the deaf child, the blind child, or any other child and see how he compares with the norm.

We can put a lot of things together and get at some points. We are in the habit of picking out our very young children who are backward by asking the mother what time did it begin to talk, but as soon as we begin to discuss the deaf child that is ruled out. But you can ask, "When did he begin to walk?" That gives us some clew and that is an illustration of what I mean when I say we haven't known the normal child. If you ask the mother, "When did the child begin to walk?" and she says, "Not until he was 30 months old," two years and a half, in most cases she doesn't think that at all significant. If you imply that it is significant, she says, "Oh, well, I know a lot of children that didn't begin to walk until then." It is true, occasionally children do not, who are normal; but we are beginning to learn now that there are definite limits and that these things are significant and that the child that does not walk until he is 30 months old is offering a strong presumption that he may be backward and defective in some way or other.

Now, no matter what signs and symptoms you can use for determining the backward deaf child, or even the deaf child, you all know that it is exceedingly difficult to tell whether the child is deaf or not. It may take two or three years. Indeed, I have had in our work children brought to us 5 or 6 years old and yet the parents had never discovered that the child was deaf. He didn't talk; they knew that, but they didn't think of his being deaf. On the other hand, we have had children, of course, brought to us who did not talk

and who were thought to be deaf, but who were feeble-minded and not deaf at all. They were low-grade idiots; the reason they did not talk was because they did not have mind enough to talk.

One of the very helpful methods that we have found in determining backwardness in hearing children is to get the family history. That, I believe, the workers with the deaf are doing somewhat; just how much I have to confess I do not know; but I want to suggest again, if there is any need of argument, if you need any arguments to put up to your trustees or others who may be responsible for the work, I believe nothing would pay better than to have in each institution a proper number of thoroughly trained field workers to investigate thoroughly, not as you can do it by writing, not as you can do it by filling out blanks; that is good as far as it goes, and your parents, I doubt not, fill them out as conscientiously as they can, but I assume that you have a good many parents considerably like those that we found in investigating feeble-minded, who can't answer your questions, who don't comprehend the questions in the first place, and, in the second place, don't know the answer. Now, a field worker going to the home asks the question, and when she finds it is not understood, varies it, simplifies it, listening to all the rambling talk of the mother or father—it may be rambling, and yet out of all that rambling talk she gets here and there an exceedingly important fact which goes down in the record. In talking with the friends and neighbors and relatives she will oftentimes ascertain facts that are exceedingly important. I need not go into that, because that is not questioned—the fact of other deaf people in the family, and all that sort of thing. The fact of nervous conditions in the family would help to lead you to expect both deafness and backardness, if the facts were in that line.

The next most interesting problem, it seems to me, in investigating the backward child is to get some line on the value of partial hearing, partial in the sense of continued partial hearing; possibly you have some technical terms with which I am not familiar, but partial in the sense of having heard for one year, two years, three years, four years, six years, and so forth. I have examined some deaf people. I remember on one occasion examining a deaf person and finding, so far as mentality was concerned and so far as I could see with my ignorance, as I have thought, of the problem that deafness was nothing but a little inconvenience; that it had no effect whatever upon the mentality.

In another case of the congenitally deaf I found conditions that, so far as I could see from just that examination alone, would indicate actual feeble-mindedness. Now, I would not make any such diagnosis as that until I had gone a great deal farther into the history of that case, because, as I have already intimated, the moment you get over to the congenitally deaf you have got an individual who is lacking one great source of information and experience, and we don't know, because no one has studied it—we don't know what effect that has upon the mind, and there are no tests that will answer that question. It applies to many more things than just those things that come directly through the sense of hearing, because our associations, our knowledge of the world, comes very largely through associating things, and if we stop and try to ask and analyze how

much the sense of hearing—what part it plays in this great building up of information through association, we are perfectly amazed to discover what things we would not know if we could imagine ourselves without hearing. So we have, as I say, a whole region there to learn.

I don't know how you are going to recognize a backward child who is congenitally deaf until some of these fundamental problems are solved.

We are told, in regard to the blind, that a person who is blind before the age of six never dreams in visual images; never sees the things in his dreams as seeing people do. I don't know about the deaf in regard to that, but a similar thing would not be quite as significant, because we don't any of us dream in auditory terms nearly as much as we dream in visual terms. If you will stop to think, in our dreams we do not hear sounds nearly as much as we see things; consequently that, perhaps, would not be a test. But, leaving that out, if we make the cross-section the same, we must, perhaps, expect that children who became deaf any time before the age of 6 would be considerably handicapped. They approach the congenitally deaf; those who have become deaf after 6, on the other hand, approach the hearing person in their mentality—I mean to say in their arrangement of mentality, for while they do not hear they have the imagination.

Persons who have lost their hearing in adult life, for instance, know that I am talking, and, getting the significance of it through the sign language, they imagine how the words sound. The congenitally deaf or the early deaf, of course, have nothing of that kind, and I suspect we deceive ourselves sometimes as to what we think we convey to them by our methods of instruction. I suppose it is absolutely impossible to convey to them what such a thing as sound is at all. Even those that speak can not have any notion of sound. Their speech is to them nothing but motion and certain muscular sensations, contractions. It can not be anything else, because it is absolutely impossible to give the mind that for which it has not the brain cells to receive; consequently, as I say, we have that enormous difference between the two.

As Mr. Gruver well said, the training of these backward deaf children should be manual. We are coming very slowly, but rather surely, to understand that the training of all children should begin with the concrete, with the manual.

People sometimes ask me if there is not danger of putting a normal child into the class with the backward in public schools or getting a normal child into an institution for the feeble-minded, and I say no; there is no danger whatever. By good luck that thing might happen once in a while. [Laughter.] I don't hesitate to say to anybody that I would just as willingly have my child under 10 years of age in a special class in the public schools or in the school department of an institution for the feeble-minded as to have him in any school for normal children that I know anything about; and I would vastly rather have him there than to have him in most of the public-school classes that I know of. Now, if that is heresy, I am a heretic.

Let me give you just one illustration. It may not be too far away from our particular problem as to why I make a statement like that.

You all know that there are a great many people who will declare to you that they are not mathematicians. You give them a comparatively simple—what is to the mathematician a comparatively simple—problem in arithmetic and they throw up their hands and say, "Oh, don't ask me; I never could do anything in arithmetic." Why is that? Arithmetic is one of the things that deals with more definite, accurately defined matter than any other science or any other subject of education. Why is it that so many people can not handle numbers?

I was associated for seven years with a man whom some of you in this locality will remember, I am sure—Prof. Sensenig, of West Chester, rather a famous teacher of mathematics—and he was always in our faculty meetings bringing up lists of pupils that had not passed examinations and had to be provided for in some way. We used to jolly him a little about it. I said to him one day: "Professor, how is it that so many of your pupils fail? Mine don't. I don't have any such lists of failures in psychology." And he took me seriously and gave me a serious and valuable answer. He said: "I have been teaching mathematics for 40 years, and I am convinced that the reason so many children fail and get confused and can't do their mathematics is because they are started in mathematics too early, before the mind is developed to the point where it can understand that kind of thing. A confusion results, confusion so confounded that it never can be straightened out." I confess to you I believe that is true, and that is why I say to you I would rather my child should not be subjected to the dangers of having his mind confused on these subjects. I would rather he would be put into a class where his work is concrete, manual; where he has things to do, things that he can understand, and let the abstract, the other part of it, come very much later. So I am very sure that that is a perfectly safe creed for working with the backward deaf children.

Now, if I have contributed anything to your understanding and knowledge of what to do with the backward deaf child, I am sure I don't know it; I am perfectly innocent.

Dr. HALL. On our original program we had hoped to have Dr. Farrington discuss this subject also—Dr. Farrington, director of the Bancroft School at Haddonfield, N. J.—and also Dr. Harris Taylor. Neither of them will be here, but Superintendent Booth, of the Nebraska School, will take part in the discussion this morning, and I will now call on Superintendent Booth.

Mr. BOOTH. As a substitute on the program this morning, and with a very difficult subject, as I count it, I apologize in advance for the probably rambling nature of my remarks.

"Backwardness" is a vague, indefinite term, one that has only relative significance at the best; and the term "backward child" can only mean, or be employed to mean, a deaf child less bright than other deaf children to a degree for it to be worth noting and remarking about—else we would not use the term as especially applied to the child.

But we could spend hours on the question of terminology, formulating definitions, without any real profit; therefore, we will come at once to the matter of what we in our schools do with the backward child—how we recognize him, and then how we treat him.

I believe that in all our schools we determine the backward child through the language test; that is, through his capacity to learn language. In our combined schools it becomes finally a matter of differentiation as between capacity to learn speech and lip reading, and lack of capacity to learn speech and lip reading; and we separate these two classes in our treatment, giving the former class oral instruction and the latter manual instruction. Now, the question is, Is this a proper thing to do?

I remember very well that Dr. Crouter once advanced the thought that "a child that can not be educated orally can not be educated at all." Well, I do not know but that he is right—provided the environment of the child is an oral-school environment throughout. [Applause.] But if it is a combined-school environment, then it becomes a different problem, and we must make the best of the situation, whatever it is, relative to the child and his best welfare.

Now, in a combined school the question of lip reading, as relative to the backward child, is this: Can he learn lip reading—a sufficient amount of lip reading—to serve him for all needs throughout his school course and to equip him for his life among the hearing? Again, can he learn speech likewise sufficiently to serve him through his course and equip him to meet the conditions of life as he will find them when he leaves school? If not, then it comes to be a question with us in the management of our combined schools of recognition and acceptance of limitations. The child is limited in his capacity and we must limit him in the field of study that we present to him; and then, having chosen the method of instruction or the medium of communication, work intensively along that line to the accomplishment of all that is possible, to give the child one means at least of communication with the public that he needs and that he can use and that the public can and will use.

And when it comes to the matter of capacity to learn language by some means I contend that it is more a question of method than of mentality. The child must have mind, of course, but it does not take necessarily a high order of mind to learn language. One can learn all the language he has need for—all, in short, that he has brain to use—provided the method employed in teaching him, and by him in learning, is the proper one.

I once spent several weeks in a feeble-minded institution [laughter], observing and studying, and I met and conversed with a good many of the inmates. I observed that a large percentage of those unfortunates could use language, some of them quite fluently. They had language sufficient to convey their thoughts, such as they were, to others, and they were able to understand quite generally what others said to them. I repeat, it does not take superior mentality to learn language, sufficient language to clothe one's own thoughts. So if our backward deaf children can think at all, they can, if properly taught, certainly learn language, language sufficient to clothe completely their thoughts and to serve them in the world when they go out from us to live their own lives, all of which, of course, means the maximum of usefulness and happiness for them.

Our methods, then, will aim to give every deaf child who has any mind at all, language, written language at least, and approximately as much language as have hearing people of a like general mentality.

Right methods will succeed in this, while wrong methods will inevitably, dismally fail.

We must know—and we must shape our methods of teaching to employ the principle involved—that every person, deaf or hearing, can understand language beyond his ability to use it. I can sit in an audience and understand an eloquent speaker when I could not get up and take his place. I can read, understand, and enjoy poetry, yet have no powers of poetic composition. We can, I say, understand language used by others that we do not and can not ourselves employ. Now, apply the principle involved to deaf children in school; we may use language, even with backward children, beyond or above their capacity to use it themselves. I am satisfied that we teachers make a mistake in limiting ourselves in our own uses of language to the mere ability of our pupils to use it in spoken or written form. We should rather use language above them, to an extent at least, and in large amount and variety, regardless of their ability, or any lack of ability, to express themselves back to us. The truest and best language test is the reading test, which necessarily involves understanding and enjoyment, rather than the writing test, so much depended upon.

Now, coming back to the question of lip reading, we observe a difference between pupils in their capacity to learn lip reading. I believe the intelligence factor in learning lip reading is a large if not an essential factor. So that is why, as the intelligence factor is not present in the backward child, lip reading is in their case a questionable subject for instruction, and in our combined schools our backward pupils should have employed instead the manual alphabet, which, furnishing a practically transparent medium for thought communication, reduces the child's language-learning difficulties by just so much.

In my own school I consider my backward class my most interesting class, my most profitable class for study. And I would say here that I do not for a moment believe that 25 per cent of the pupils in our schools are backward; I question if 10 per cent are backward to the extent that they need to have a special or limited method of instruction.

I count my backward class my "research laboratory," applying there the acid test to the working of all my pedagogical theories; and I believe that if we teachers would thus make more use of our backward pupils to test and prove our methods we might learn lessons and uncover principles that could be applied in the instruction of our brighter children. I have so used these tests, and through them have made discoveries that have led me to the belief—the firm conviction—that English language methods must be exclusively used, and especially with backward children. In the very nature of things, the best for backward children can not be too good, and in my experience I have, I feel, demonstrated that purely English language methods are the most effective in their development and instruction in giving them knowledge with a practical working command of the English language. Moreover, if the sign language is harmful anywhere in the school, it is most harmful in a class of backward children, where the teaching-learning conditions must in the nature of the case be as favorable as it is possible to make them. We learn—

and backward children must so learn—language through using it and depending upon it, depending exclusively upon it. That is the essential thing. Hence, as I say, we get in our laboratory tests, or acid tests, this conclusion on my own part, that the purely English language method is the one and only method that can be successfully used with backward deaf children. The sign language is a weed language; it grows naturally and, if allowed to do so, it crowds out any and every other desirable growth. Now, we properly keep weeds out of the farm or the garden when we plant and cultivate things that we wish to grow. And that is what we must do in our schoolrooms where we are cultivating, developing the English language; we simply must keep the sign language out, and this in order to give the language that is being cultivated and the minds that are being trained and developed the most favorable conditions for growth that the school in its methods can devise and provide. [Applause.]

The next on our program to discuss this subject this morning is Miss Edith Fitzgerald, of the Wisconsin school. I will ask her to take the platform now and continue the discussion.

Miss FITZGERALD. Mr. Chairman, ladies, and gentlemen, I had no idea how long I would be allowed. There are a number of points I should like to discuss, but I shall try to touch only the most important of them.

In the first place, I want to compliment Mr. Gruver on his excellent paper. It is plain to us that he has looked at this subject from just about every standpoint, and also that in his paper there is more than food for thought for those of us to whom the subject is near and dear. I realize that Mr. Gruver's paper though is necessarily that of a superintendent, and that he discusses the subject more from the standpoint of a superintendent; but the problem of the backward deaf child is to be solved in reality by his teacher, for the teacher comes nearest to the child.

Mr. Gruver spoke of the hopes of a deaf norm being established. Dr. Pintner Thursday night in a most interesting manner showed us what has been done with older children, how they are being tested. Now, what about the young ones, the children just entering school? I should like to mention one case. A child was admitted to the Wisconsin school a few years ago, and to all appearances was feeble-minded. Mr. E. W. Walker, our superintendent, hesitated very much about admitting the child, but finally took him out of sympathy for his parents. Well, he was sent first, as usual, to the oral department, but in a very short while found himself in my class. At Easter of that year his mother came to school and among other things she brought him a chicken to give to me. I want to picture to you his condition at that time, even after I had worked with him perhaps three months. The mother tried in every way imaginable to make the child understand that this chicken was for me and finally she had to go over to him, take his hand, put the chicken into it, lead the child over to me, and knock the chicken out of his hand into my lap. And even then the child's face was a perfect blank!

At the end of that year Mr. Walker said, "Nothing doing; that child can't come back." But I was sure that he could be helped, so I went to the office and said I wanted to have him another year just for one year's trial.

Mr. Walker laughed and said, "Well, if you make a very strenuous plea perhaps I will let him come another year."

I said, "I make that plea here and now."

So the next fall I resumed work with him and at the end of the year his improvement was such that there was no question about having him return. At the end of the third year or two years from the Easter of which I spoke, he was not only doing good school work but he was reading several commands from my lips. In June I recommended him for the oral department. He was transferred and is now doing good work in an oral class with average deaf children. His speech is not very good but his lip reading is. The mother's heart is set on having her boy talk and read lips, so I feel that under the circumstances he is in his right place.

I could tell of other instances such as that, and I feel that to have saved even one young child from being sent to the home for the feeble-minded has made the work more than worth while. I feel, therefore, that there should be in each school a special class with a teacher who understands the deaf mind, understands its possibilities and its limitations, and who attempts to overcome those limitations to the utmost.

My work during the last few years has been largely special and, of course, individual.

I do one of three things for all children sent to me: I either return them to the oral department—that is my first aim, for I feel that every child should be given the chance to learn speech—or I send them on in the manual department. I should like to say right here, though, to Mr. Booth, that I don't teach through signs; my aim, my hobby, is English, the English language. Of course, in attempting to wake these children up we have to resort to signs or to anything else we possibly can in order to reach them; but when they begin to wake up I use English. For instance, at first a child, if it wants water, must sign in some way to show what it wants, but just as soon as it is able to spell it must spell "water"; then after that, "May I have some water?" or "May I have a drink?" Whether the work is carried on orally or manually depends upon the child.

In my opinion, good lip reading requires talent, and the ability is possessed to a greater extent by some than by others. I feel that there are probably many backward children who can progress to the best of their ability under the oral method, but I think in each case home conditions should be taken into consideration. The method used should be the one that means progress and happiness for the child and the happiness of those connected with him.

So each child sent to my class is finally started in one of three directions: He is returned to the oral department, is sent on in a manual class, or plans are made to send him to the home for the feeble-minded, at Chippewa Falls. This third, or last, course is taken only after I am sure the child is incapable of much school work or when he develops certain characteristics that make him an undesirable associate for our other children.

I feel, also, not only that there should be such a special class in each school but that provision should be made for departments for our older backward children, and that over these departments should be people who thoroughly understand the children and who will do

all they possibly can to make them happy. They should be taught suitable trades and have a great deal of handwork, while the language given should be mostly language in connection with their work and with the lives they live; that is, the language of things pertaining essentially to them.

Mr. Gruver said that if the teacher failed to spur the child on to endeavor, the parents should look deeper for the cause of the trouble.

That recalls what has always seemed to me a sad part of the situation regarding a deaf child. If, after he has been looked after physically, an experienced teacher fails to help him, I fear his parents will be utterly helpless.

Among the causes for backwardness Mr. Gruver spoke of defective vision, defective hearing, etc. To me one of the greatest causes appears to be the lack of will. Here is where the teacher's work comes in; she must create in the child the desire to work, the desire to do, and, of course, this is sometimes done one way, sometimes another. Naturally, the work is individual, and no two children can be taken in the same way; so the teacher has to study each child and find a way to reach him.

I remember one little fellow I had a few years ago. He had been in the oral department two years and was doing almost nothing. When he came to me I said I knew that the child was not feebleminded. I always say that in the first place, though. I refuse to limit a child.

I tried to find out what the boy was thinking about, and found that he had a real talent for drawing and construction work; he was really a genius when it came to construction work. So I gave him so much time every day to do something he really desired to do, and eventually began to bribe him by giving him, for good lessons, one hour every day to do as he wished. The furniture he made, the different things he made with cardboard paper, were really wonderful; and now that boy is in the seventh grade—manual—and doing well.

There are other cases. One little fellow I reached through his love for flowers. He was a little waif, a Milwaukee waif. Mr. Walker found him, just sleeping around any place. Well, it seemed a hard case, and there were times when I felt really discouraged. His idea of life was to be a bully, and that was all; but one day something happened that made me see that child was fond of flowers. So I began by placing a little bouquet of flowers or a plant on his desk, and that was the beginning of our English work. After that I noticed very often that when he was writing or studying in school he would look around, his eyes turning toward the windows where other plants were, and he would drop everything, get up, walk over to those plants and begin to fondle and examine them. Of course, I never saw any of that. He would come back to his seat refreshed and seemingly happier to go on with his work.

So, you see, you have to study each child, and there are very few children who can not be reached in some such way. Of course, our work is individual and is very, very hard; as Mr. Gruver said, it taxes the ingenuity of the teacher to keep the children occupied. In my opinion, the only way, if but one teacher is in charge, is to have them in school in shifts, during all but perhaps one hour of the five. By such an arrangement the teacher is relieved during the other

four hours of at least one child, and that child is running no risk of falling into bad habits while sitting in idleness waiting for attention from the teacher.

About this fellow who loved flowers I should like to tell you of an incident that just came to my mind. For about 15 minutes every Friday afternoon I let the children do whatever they chose; let them decide what we shall do. At this time we were having trouble with our plants. I had tried different remedies, had doctored them in different ways, but it didn't work. There were little white insects on them. So that afternoon I said: "To-day is Friday. What would you like to do?" Instantly this child's hand went up, and he said: "Pick the bugs off the flowers." And so we all went to work and picked the "bugs" off the flowers, having a very happy 15 or 20 minutes.

Love is one of the very first words I teach, and I try to have the children realize the meaning of that word to the utmost. My first aim is to make the children happy and to keep them so; then to gain their confidence and never to violate that confidence. The work is hard, naturally hard, but it is very interesting, and my regret is that more of those entering the profession are not making a study of the backward deaf child. It takes time—often a great amount of time—to gain results, but in the end you will feel more than repaid.

Now, I want to branch off just a little. As Mr. Gruver said, the training of the backward deaf child is going to have a more important part in our educational scheme than it has had. I am sure of that, and I feel that now the backward deaf child is beginning to come into its own.

But I should like to make a plea for one other type of child just a little beyond that. I have here a copy of the Training School Bulletin. Many of you no doubt have heard of the school at Vineland, N. J., where the paper is published. Dr. Goddard, who is with us this morning, was formerly connected with the Vineland institution, a school in which I am very much interested.

I try to keep in touch with the work there and find the magazine very interesting and helpful. I did not realize until this morning that the article from which I intend to quote was from the pen of Dr. Goddard. The few lines I shall read will help emphasize a point I wish to touch:

> Certainly no one has a better right to happiness in this world than that individual who is so deprived of normal mentality that he is unable to take care of himself. We recognize it as both a duty and a privilege of those of us who have the intelligence so to arrange the environment of these unfortunates that they shall be able to enjoy all that their limited mental capacity will permit. The mental defective whose condition is unrecognized is among the most unhappy of human beings. He is constantly being misjudged; he is continually held up to a standard of responsibility for which he is not at all qualified; he is not only the butt of his associates in the child world, but he is the victim of punishment at the hands of his elders. To recognize his condition and treat him accordingly is to perform an act of simple humanity, but one that is fraught with enormous consequences for him; and not only him, but for society in general. * * *
>
> Unrecognized, the mental defective is unhappy and is driven naturally into crime, pauperism, prostitution, drunkenness, or some other antisocial conduct. Recognized, cared for, and made happy, he does not develop these antisocial tendencies, but becomes rather a harmless member of the community, the object of sympathy and help, and with wise training may even become helpful in a limited way.

A few years ago it was my privilege to visit the home for the feeble-minded at Chippewa Falls, Wis., and after that there was little sleep for me for several nights. There are about 1,100 children there, and among those 1,100 are, or were at that time, 14 deaf children whom I was allowed to see. There were two or three others whose condition was such that I was not permitted to see them. Do you know, those 14 children were not grouped together? They were living, 1 here or perhaps 2 there, alone, among 50 or 75 hearing children. The latter attended schools so long as they profited in the least thereby. Nothing of the kind was being done for our children, and there was no one who could talk freely with them. Really, it was one of my saddest experiences to see the longing, the hunger of those children to have some one with them who understood them; to live with them and to help them.

Of course, in the two days I spent at the home I could do almost nothing, but I decided then and there that I was going to get busy and do all I possibly could. If nothing else, I would try to arouse interest, so as to have these children put together, with some one over them who could understand them and talk to them so they could understand. So I began with the board as soon as I could—the board of control—and gained their interest to a certain extent. I am told that the deaf are all together now. I offered my services the next summer for a few weeks for nothing; I wanted to go up there and do what I could for the deaf, but the superintendent couldn't see the necessity for it. They seemed to be regarded as mere animals, incapable of being made happy; so my offer was refused. But I am not through; I am still working. [Applause.]

As a last word to you, I want to ask your interest, not only in the backward deaf child, but in the feeble-minded. There are very few of them, as Mr. Gruver said, but those few are thoroughly entitled to all the happiness they can possibly get out of life. So I hope that if any of you at any time can become instrumental in having something done for feeble-minded deaf children, you will not lose the opportunity.

I see I have a moment or two longer. I should like to tell of one girl placed at Chippewa Falls whose mother felt just as I, that it was not right to have her in that environment, but she could not keep her at home. I had had her in my class at the Wisconsin school, but during one summer, when I was away, she was sent up to Chippewa Falls. After seeing her during the visit to the institution, I found that she was very, very unhappy. Later her mother wrote to me that she had taken her home again and wanted me to come to see them, and asked me to come up to talk matters over with her. The girl was 22 or 23 years old, and I felt that if first sterilized, she could obtain work and could support herself if some one looked after her. So I agreed to look after her and to do all I possibly could for her. The girl was given a position in a laundry, and now she is earning $35 a month and maintenance, and is very happy.

I believe that the feeble-minded should be colonized, and this girl's case goes to show that some of our feeble-minded are capable of far more than is supposed, and that such colonies could be largely self-supporting. But, above all, the inmates should be made as happy as possible and kept so. [Applause.]

Dr. HALL. We have ended the formal discussion promptly. If there is no objection we will give Miss Reinhardt a few moments for a statement which she wishes to make.

Miss REINHARDT. I just want to say, apropos of what Dr. Goddard said about giving arithmetic to young children, when I was taking a lecture in psychology from Earl Barnes he said the reason why such a small minority of American citizens read the life of George Washington was because George Washington was thrust upon children in the kindergarten.

Dr. HALL. We have reached the time to proceed with the formal program, and I will now call upon Miss A. E. Jameson, instructor in Gallaudet College, for her paper on normal training.

NORMAL TRAINING.

By Miss A. E. JAMESON.

This paper will be a brief account of the course given to the normal class in articulation in Gallaudet College.

One hesitates to offer details of such work before an audience such as this, many of whom have been doing similar work for many years. And so, if you say to yourselves, "Why of course," you will be held entirely excusable.

We desire that those entering our normal classes at Gallaudet College shall be graduates of colleges, and about two-thirds of them have been such. It is none too complete a preparation. The normal student can not know too much. Yet to all of the class the work is so different from anything they have pursued before, that, college graduates or not, it calls on their part for an amount of mental readjustment which the teacher, so familiar with it all, may easily underestimate, and on the teacher's part for a corresponding output of patience and clearness.

(Those who have completed a college course before entering our normal course) have received on the completion of the latter the degree of master of arts formerly, but since 1914, that of bachelor of pedagogy.

For an hour a day during the first term of our college year the normal class meets to take up a study strange and unknown to them, that of articulation. After a short account of the work that has been done in centuries past and gone to give speech to the deaf and dumb, and of the various methods by which the deaf are taught at the present day, we plunge into the study of the formation of the elementary English sounds. The teacher first gives a full description of one of those sounds, without naming it. She then requires each normal student to discover for himself or herself what that particular sound may be. Diagrams showing the positions used in making each consonent and vowel are drawn by the students as they are learned, and are copied into their note books, when both the artistic quality and the accuracy of the position justifies its preservation. The volta bureau supplies diagrams, some 20 or 25 on a sheet, partially completed, but leaving the positions of the lips, tongue, palate, etc., to be drawn in by the class. These are helpful in the early stages of diagram drawing.

Words illustrating each elementary sound are demanded of the class. Their teacher has sometimes felt a little embarrassment at asking for simple words to illustrate initial and final sounds, double and treble consonant combinations, etc., fearing that the class, some of whom may be college graduates, with letters after their names, may feel and show some contempt for such primary grade work, but when perplexity and deep brooding settles down on the brows of the normal class and nothing is heard in our classroom for a few moments but the ticking of the clock one feels that it was no mistake to have mentioned the subject. It is absolutely necessary that when they teach they should have at instant command many words, phrases, and sentences to illustrate each correction which they desire to make, and these must be at instant command because later in the year our normal students teach speech and speech reading to some of our college students who have a fair-sized vocabulary, and the shortness of time allotted for their lessons admits of no loss of time spent in thinking up words. Of course one does not expect normal students to select always

wisely or well, for the knowing what to choose, so that the successive steps in the correction or illustration may proceed from the known to the unknown, comes only with experience.

Some time is given to the study of visible speech, long enough to give the class the theory of it, if not much facility in reading and writing it. It is another way of presenting to them the positions of the vowel and consonant sounds. It visualizes them to their minds.

Preparatory gymnastics, such as you are all familiar with, charts, breathing exercises, exercises for improving the voice, etc., exercises for training the senses of sight and touch, with supplementary reading from Arnold, Lennox, Browne, and others, are given and are set down in their notebooks. These notebooks are looked over occasionally to prevent any mistakes being carried away to some school. One would not care to sponsor this, for instance, instead of "diaphragm breathing combined with rib breathing," the student's notebook had "diaphragm breathing combined with lip reading," faulty enunciation on the part of the instructor or faulty lip reading possibly on the part of the normal student.

Next follows the study of the process of the development of the sounds. The ways and means by which sounds are taught have of necessity been sometimes practical, oftener more or less theoretical. Occasionally some one of our college students elects to make a belated effort to learn to speak and is willing to be taught before the normal class as a subject of observation and criticism. Always, unfortunately, it is possible to find those who will kindly show the normal class faulty sounds, nasal tones, etc. The class is urged to diagnose the speech of the deaf, and the hearing as well, and consider what the faults are and how they should be corrected.

Then we study combinations, what they are, how they should be developed, the order in which it is advisable that they should be taught in order to obtain the best results, lists of words to illustrate, lists of terminations that contain difficult consonant combinations or obscure vowels, exercises to develop fluency, to teach accent, phrasing, etc.

Next we turn to the subject of speech reading, what it is, and its inestimable value to the deaf, in that it presents correct English forms to their minds, and gives them a means of communication not only with the outside world but in their homes, where the sign language has not usually been adopted by the nearest of kin. The students are shown how it is first presented to a class of beginners, what exercises are used in the older grades, and, lastly, how the adult deaf are taught. The various methods by which the deaf have been taught speech reading are touched upon, and sample lessons are written out by the class.

Diacritical marks, those in the Century Dictionary and in Webster's, are reviewed by the class so that they may use them with the college students they are later to teach.

Lectures on the anatomy and functions of the throat and ear are given by a physician. The class prepares for the lectures by considerable reading on the subjects and after the lectures each writes a paper embodying the notes he has taken during the lectures and the reading done in preparation.

In the second and third terms of our college year our normal class puts into practice what they have been studying in the first term, by teaching a certain number of the college students daily, suiting the lessons to the special need of the student. That work is supervised, of course, material is furnished, suggestions and help given.

It is of much importance that, before entering our training classes, students should have either a college education or normal-school training. That would prevent their entering them at too early an age. Those who enter very young usually lack a sense of responsibility; they lack judgment; they do not grasp the essential things about their work or study. Their immaturity is a decided handicap in this serious business of being a teacher, especially being a teacher of the deaf. We all agree that the more education, or better still, the more cultivation those entering our training classes possess, the better qualified they are to succeed in their work.

Teachers of the deaf should have an attractive personality, a clear enunciation, good health, energy, enthusiasm for work, sympathy for their pupils' problems, and, above all, a well-stored mind that can impart clearly and forcibly much in the way of information that the pupils can get in no other way than from their teachers. They should have a knowledge and an enthusiasm for

all that is fine in literature, in art, in things of the spirit. The teacher must in fact be an encyclopedia of useful knowledge.

The coming years are to be very critical ones in the teaching profession. Opportunities are arising everywhere other than teaching, very attractive opportunities that offer more compensation than our boards and legislatures think educating the children of our land is worth. All over our country, in colleges and schools for the hearing, and in our schools for the deaf as well, this great shortage of teachers is being felt. Heads of schools will be compelled to accept undesirable material sometimes in order to have the necessary number of teachers to equip their schools. This is a most unfortunate and regrettable situation, when everywhere we are anxious to raise our standards of admission to our training classes, not to lower them.

But let us not be weary in well-doing but redouble our efforts to train those who do enter our normal classes to feel that unusual responsibility rests upon them. Let us fill them with a strong sense of their duty to the pupils intrusted to their care, that all the work, especially the beginning work, must be done with much care and thoroughness, nothing overlooked through all the grades, that a thing taught has not necessarily been learned by the pupil, and that always they must be earnest, painstaking, thorough, and sincere.

We may well keep in mind these words from "The Education of Henry Adams": "A teacher affects eternity; he can never tell where his influence stops."

Dr. HALL. Miss Jameson's paper on normal training will be discussed by Dr. Crouter.

Dr. CROUTER. The admirable paper just submitted by Miss A. E. Jameson conveys a clear and concise statement of the course pursued in the normal department of Gallaudet College for the training of young men and women for the work of teaching the deaf in our various schools. It goes without saying the course is wisely conceived and for the most part admirably executed. A great many of our schools have reaped the rich benefits of the department in providing superintendents, principals, and teachers who by their success have created an enviable record of its great usefulness. I speak from experience regarding this matter. The institution I have the honor to represent here to-day has had many representatives from this department, and in no one instance do I recall a pronounced failure.

The department has supplied some 18 superintendents and principals as heads of schools and important departments of institutional work in addition to a number of prominent teachers. This is certainly an enviable record and one well worthy of emulation.

Miss Jameson, by reason of superior education, training, and long experience, combined with an admirable personality and strong leadership, is well qualified for the task she has for many years had in hand, and under the wise supervision of Dr. Hall has admirably managed the intricate affairs of the department.

Her excellent paper calls for special notice at several points. Miss Jameson very wisely lays emphasis on the requirements demanded of students taking up the course. They are required to be young men and women of collegiate or normal training, of sterling character, good health, and possessed of a natural aptitude for the work of teaching. This is of first and vital importance. There is no use in expending time and energy and money upon mere dolts who under no circumstances will be able to make a success of their calling, which it goes without saying is one of the most difficult in the whole category of human effort. The course of study includes thorough and prolonged training in phonetics, in the development of voice, in the

science of speech reading, in the study of the anatomy and physiology of the vocal organs, and in the study of visible symbols or visible speech as developed by Dr. Alexander Graham Bell and Dr. Caroline A. Yale. A full course of related reading by the best authors is also required. This, to my mind, is all too full a course to be satisfactorily completed in one year. Two years should be allowed and required in order to send out the fully equipped teachers our schools are constantly calling for.

I note Miss Jameson makes no reference to the study of domestic economy or to the best methods of securing and enforcing proper discipline. These are both important subjects and should, in my opinion, be included in the course. It may be urged that these are topics that may be taken up in a practical way when teachers enter upon the execution of their formal tasks after appointment as instructors. But I submit much valuable time would be saved and many weary hours of training would be spared to heads of schools could normal students have careful training in these branches before accepting positions as instructors.

I note further that certain supervising duties are required of students in the correction of the faulty speech of students in the collegiate department. Such work, in my opinion, should be given to the most expert and highly trained teachers, the normal students being present not as instructors but as learners. The correction of faulty speech, always a difficult and irksome task, should be conducted by experts especially appointed for such work, and even under such conditions the results, frequently owing to lack of time, are far from satisfactory.

Miss Jameson's remarks as to the qualifications, natural and acquired, of young men and women seeking training with the view to enter the work of teaching deaf children are all to the point, and are worthy of every attention, if the profession is to enroll in its ranks young teachers capable of fully meeting its future demands. Too little attention is often given by heads of schools, sometimes it is true from necessity, to this important matter, with the result that failure and disappointment in many instances inevitably follow.

In the olden days, it was not infrequently the custom to place a young man in charge of a class with little or no previous training, in the hope that he might be able to win his spurs after ruining two or three classes. This, happily, is no longer the case and young men and women are now required to enter upon the work as teachers with sufficient preparatory training to warrant their probable success from the outset.

Miss Jameson refers to the scarcity of teachers in well-chosen words. We are all conscious of this fact, and would gladly see it remedied. But how shall the crying need of more and better-trained teachers be met? It is a subject which I venture to say is engaging at this very moment the serious attention of the heads of many of our schools. I can suggest but two ways of meeting the difficulty: First, by offering better salaries to young men and women of ability as an inducement to enter the work, and second by establishing a larger number than we now have of well-appointed and well-conducted training schools. There may be others here who have better

solutions for solving the problem; if so, I am sure the convention will gladly hear from them.

Miss Jameson, I am credibly informed, has signified her intention of retiring from the work at an early date. This determination, I am sure, will be regarded as a distinct loss to the profession. A knowledge of Miss Jameson's work both as teacher in primary grades and as director of the normal department at Gallaudet College, bids me say it will be difficult to secure a successor so talented and so highly gifted to fill her place. The profession is losing many of its best men and women, and those remaining must have a care lest the loss be irreparable.

Dr. HALL. I am not going, I hope, to start a discussion, but simply to ask the indulgence of this gathering for a brief statement before the reading of the next paper. A reference has been made to signs as weeds.

In the wheat fields of Devonshire, it is true, there are weeds, as perhaps some people call them, scarlet poppies growing. The farmer does not want them in his wheat fields, but how beautiful those same poppies are in my garden at home.

I am now going to ask Dr. Hotchkiss to read a paper on the sign language at Gallaudet College.

THE SIGN LANGUAGE AT GALLAUDET COLLEGE.

By Dr. J. B. HOTCHKISS.

Now that the full title of my paper stands revealed, my hearers may think the program title misleading. If any set up a claim of false pretenses, I confess judgment and give them leave to cut this hearing and make for home if they would escape the crush of the rear-end collision of two holidays. In any case they will doubtless think my subject threadbare, out of date, ancient history, and little applicable in these times of visible speech.

I acknowledge that the pages of the back numbers of the Annals are replete with learned disquisitions upon the sign language from almost every point of view and that I can hope to present little that is new. I am also aware that as a means of education it is looked at askance, even by its friends, as a sort of necessary evil; that by others it is denounced as the great obstacle to the acquisition of correct English, and ridiculed as a fantastic, grimacing hodge-podge of ideas.

Although disposed by nature and training to accept the conventional, I find myself asking why this language of signs should be denominated any greater obstacle to the acquisition of the mother tongue than any other language. If a child has always used French, does that fact, per se, prevent him from attaining a foreigner's proficiency in English? And a foreigner's proficiency in the mother tongue is all that the deaf from birth can ever hope to attain, no matter by what method they are taught. The many years during which I have handled the peculiar language of congenitally deaf youth, taught by all methods and by no method at all, have led me to conclude that, on the contrary, there is a tonic quality in signs stimulating to thought and language. For this reason I think that signs have a vital educational value in and of themselves, and the only question is the rather large one of when, where, and how to use them.

I ask you to note here that when I speak of signs simply I refer to signs in their picturesque purity, not to the clipped, jerky, ineffective jargon that is usually associated with the term.

If we turn to the psychologists, we will, perhaps, find an explanation of this tonic effect of signs, and a remedy for that defect in the deaf which some teachers have loudly bewailed as their great stumblingblock in learning language, that is lack of imagination.

Prof. Wundt says, "Imagination is, in reality, a thinking in particular sense ideas. As such it is the source of all logical or conceptual thought." And

Halleck adds, "The man who does not think by images will never be a clear thinker." Tyndall has labored to make this point plain. Would the mind grasp the phenomenon of light, it must conceive ether as a body of fluid matter pervading all space, whose luminous waves ripple, in varying velocity, from the disturbing body to all shores, and, striking the optic nerve, produce in us the sensation of light and color.

Now, this is just what the mind of the sign maker does: It is all the while calling up images of former precepts, searching them for likenesses to the thought in hand, and, when found, striving to reproduce them in signs as expressing his thought. This is thinking in images; this is conceptual thought.

The youngest child, deaf or hearing, performs it all when the one with his two forefingers tries to represent horns protruding from his head and the other says, "Moo-moo." Here both alike seize upon that peculiarity of their mental images which most impresses. The mind of the deaf child, shut off from auricular perception, reverts to sight sensation, while the timid soul of the hearing child, startled by that mournful call of the animal mother for her lost child, reacts to sound sensation. When these two children later learn to use "cow" to represent their concept, they pass to what is to them a dead symbol. There is nothing in the word "cow" to suggest that animal to them.

As these two children advance to more complex ideas, the hearing child has many and varied sensations through the ear and eye, aiding each other, to develop his imagination, while his deaf brother, largely confined to his despised signs, advances more slowly, and yet he does advance. The abstract, intangible "darkness" becomes a double curtain or double doors closing before his eyes; "impenetrability," an awl that can not make a hole; "character" is form of soul; and so on, his mind always searching for resemblances between the abstract and the action, state, or appearance of some concrete thing.

This process is the basic operation of all mental culture, and yet it is attempted to deny to the mind of the deaf child this natural means of growth, to confine it at the most plastic period of its development to a restricted exercise of its faculties. Is it any wonder that many deaf children lack imagination and appear mentally hidebound? Is it any wonder that in the face of relentless inhibition they cling to their despised signs and bring them forth in vivacious gladness when the restraint is removed?

That father was wise who, finding that his son was deaf, after considering the several methods of educating him, said, "Providence has closed one of the avenues to my boy's mind; I will see that as many others are opened as promise to supply in any measure his loss of hearing." And he gave him lip reading and speech, and spelling and signs, his only mistake being in the order in which he had them taught—lip reading and speech first, and then signs. The impressionable first years being wholly spent in the mechanical drill of speech and lip reading, left that boy with an unresponsive imagination.

Now, Gallaudet College recognizes the value of the sign language as a stimulant and feeder of thought, as well as for its being the only means of addressing effectively large gatherings of the deaf. It recognizes, also, that this sign language, because of the disfavor and neglect to which it has been subjected, has within the last two decades rapidly deteriorated; and that, in turn, this disfavor and neglect is in a measure justified by the slovenly and incomplete manner in which this language is now handled by the great majority of those who use it. Gallaudet College would, therefore, revive its study, restore its purity, revivify its picturesque appeal to the emotions, and, in short, make it the power that it was in the old days in the hands of the Gallaudets, the Peets, the Huttons, the Bartletts, the Fosters, and the Turners. With this object in view the college has established regular courses in public speaking in signs in both the normal and the academical departments, and proposes to develop them, and to follow them up, hoping by this means to awaken renewed interest in this language among its student body and to correct the jerky mixture of incomplete signs and indistinct spelling now so prevalent in the delivery of most of them.

Going back to the old days, one is struck by the fact that the most graphic sign makers were to be found among the college-bred hearing teachers of the deaf, and I, who have sat under the magic of their spell, tell you, they were great. Why, my friends, they simply let themselves go; and their imaginations, freed from the shackles of their Puritan restraint, rejoiced in their freedom, and carried us children with them. I have sat for the full hour of their talks thralled by their dramatic presentation of the simple Bible tales, and wished

that it could go on forever. Was there any lack of imagination among their pupils? From all the information that we possess, we may answer that, considering the limited time that the children were allowed to remain at school, no method, no system since devised, can show better results.

This suggests that the hearing teachers of to-day would do well to perfect themselves in this sign language, to get at the secret of its power and inspiration, and then to let themselves go. Only so can they expect to see these children of silence brighten to their full development in mind, soul, and language. With this suggestion, I leave it to you.

Dr. HALL. The next paper on our program is on Preparation for College in English Composition, by Prof. Herbert E. Day, of Gallaudet College.

PREPARATION FOR COLLEGE IN ENGLISH COMPOSITION.

By Prof. HERBERT E. DAY.

There is no reason why this paper should be called "Preparation for College in English Composition," because what I have to say applies just as well to the teaching of English to all deaf pupils in the upper grades, whether they go to college or not.

Four years ago, Gallaudet College revised its entrance requirements in English. The examination, formerly treated as a single unit, was subdivided into grammar, composition, and reading. At the same time the college issued a pamphlet stating definitely the preparation in English expected of each candidate for admission to the preparatory class.

There were several reasons for this change. It was thought by some superintendents that the course in reading was too difficult for the average deaf boy and girl; that the requirements for admission in composition were indefinite; that the requirements for the three subjects were not sufficiently differentiated. They also added that they did not know exactly what the college wished in the way of preparation.

On the other hand, we at the college who prepared the questions and read the entrance papers felt that it was only fair to the pupil that three people instead of one person should do this work. Therefore, the committee appointed to revise the requirements greatly simplified the course in reading. And in a pamphlet published at the time, as well as in subsequent catalogues, it stated exactly what was expected in the preparation of a pupil in grammar, in composition, and in reading.

For the past four years I have had the pleasure, often a doubtful one, I must confess, of reading the entrance papers in English composition, papers written by more than 300 of the brightest pupils of the schools from which our students come. In reading these papers I have been struck by certain errors common not only to the pupils of one school, but common to nearly all. Such errors are: Lack of understanding of the meaning of a sentence or of a paragraph; inability to ask and to answer questions; inability to grasp the main thought in a sentence or paragraph; lack of definiteness in expression; ignorance of the technique of English. It is the object of this paper to point out a few of these common errors and to suggest to the teachers a possible remedy for some of them. I shall give five short examples.

Why, after 10 or 12 years in school, should a pupil write English like this? The following letter is in reply to the request, "Write a letter to the Goodyear Company, Akron, Ohio, asking for a position":

"GOODYEAR RUBBER COMPANY,
"Akron, Ohio.

"GENTLEMEN: I will write a letter to you to-day as I often heard and read the newspaper about your circumstance and the workers are fine works.

"I want to apply for a position. What kinds factories that would suit for the women? Please tell me at once and say how much wages of each position. How many girls and women are there?

"How much cost, if I start to learn how to work and how long it will take the other girls to learn.

"Hoping to hear from you as soon as you possibly. I am,

"Yours, truly,

"(Miss) ——— ———."

Here is another sample:

"THE GOODYEAR RUBBER COMPANY,
"Akron, Ohio.

"DEAR SIRS: I submit my application for your company. I want a good position that I weigh 1ℓ0 pounds."

The following is in answer to "Describe the teacher who is conducting your examination in English composition":

"My teacher is Miss ———, who has taught me four years. I think she is the best I ever had because she knows how to teach the deaf pupils. She has taught the deaf for many years. This year she teaches the seniors and I think she has done her best and everybody thinks that she is the best that ever taught the seniors. She always is ready to help any one who needs help."

In reply to these instructions, "Write a telegram to your father asking him to meet you at a certain place at a certain time," is the following:

"JOHN DOE,
"*77 Blank Ave.*, ———, ———.

"MY DEAR FATHER: On June 28th I will go home for my summer vacation. Please meet me at the Pennsylvania Railroad Station in ——— (city) at 11 o'clock. Your loving son."

This paragraph, taken from a textbook used in history by the students of the preparatory class, had to be dealt with as indicated below:

"Tax farming.—Rome adopted for her Provinces the method of taxation that she found in force in many of them. She did not herself at this time build up a system of tax collectors. She 'farmed out' the right to collect taxes from each Province. That is, she sold the right, usually at a public sale to the highest bidder. Of course, the senate first fixed the proportion of produce or amount of money which each part of the Province was to pay. Then the contractor, or 'farmer' paid down a lump sum, and had for himself all that he could squeeze from the Province above that sum and the expenses of his agent."

Instructions: "Copy the above paragraph carefully. Change each sentence in the paragraph to a question. Do not write questions that may be answered by 'yes' or 'no.' Rewrite the paragraph in your own language."

Here is how one candidate for admission treated the paragraph in question:

"What was Rome doing?"
"What did she not do at that time?"
"How did she frame out?"
"Where did she sell at the highest bidder?"
"Then what did the contractor or 'farmer' do?"
"Rome was going to sell her Provinces, but she was going to get the money back which were taxed. Then she figured all out she could about her Provinces. All her Provinces were sold at the public sale to the highest bidder. Then some one would try to get something at the highest prices and everyone paid down a lump sum. After paying the agent, she gains little more money than they were worth, besides with taxations on them."

Mistakes like these lead us to the question whether the pupil has been properly taught, and whether the superintendent has as carefully chosen the teacher for his advanced grades as he has for his primary department.

It goes without saying that a teacher should be a master of the principles of the English language and should endeavor to teach these. It is a waste of time to correct mistakes that the pupil should not have made or that he should be able to correct himself.

What should be the purpose of all our teaching, for a definite purpose we must have if we hope to get anywhere. It seems to me that our object should be twofold. First, we must teach the pupil to understand what he reads; second, to express his thoughts so that others may understand him. Can this be done? If so, how?

Too often we expect our pupils to express themselves before we have given them the means of expression. A friend of mine is teaching a little deaf girl of 3 years, and I have been impressed with the amount of information that is being given the child. As yet there has been no attempt to have the child express herself.

Every schoolroom should have a library with books suited to the understanding of the pupils, and every day the teacher should spend half an hour reading with her pupils. The daily paper and the magazine should be used as part of the day's work. If the pupil meets a word with which he is unfamiliar, give him a synonym for the word, or if he is advanced enough, send him to the dic-

tionary to look up the word. Give him the written word, not the sign. In our daily use of English all of us know the meanings of many words that we seldom use in writing or in conversation. We have obtained this knowledge by reading or by study and, although we do not use these words in expressing ourselves, it is invaluable knowledge.

Another way to add to the pupil's vacabulary is to require him to metaphrase. The results may not always be pleasing, but if the teacher takes care to underscore words for which synonyms may be substituted he will find that his pupils are adding to their vocabulary each day.

Often the language of the textbook puzzles the pupil. One word for which he does not know the meaning may baffle him completely and the sentence may have no meaning to him because of that particular word. It is a good plan to go over the advance lesson in history with the class, giving synonyms for new words. Be sure that you write the word and the synonym.

After our pupils leave school, practically all the composition that they need is letter writing and written conversation. Therefore in letter writing we should teach thoroughly the headings, addresses, salutations, the complimentary close, and the signature. There is no excuse for such mistakes in a salutation as "Dear the Faculty," or "Dear Gentlemen," or "Dear Teacher," or "Dear Edward," as one of our students addressed Dr. Fay, or for such an ending as "Your loving friend" when concluding a letter asking for a business position.

I notice that many candidates for admission to college seem unable to ask a question requiring a definite answer, or to write a definite answer to a question. Teach your pupils to make each question complete in itself and not depend upon a former or subsequent question to make its meaning clear. Much time should be spent in writing questions and answers. It is needless to say that the purpose of questioning is to require the pupil to think; not merely to parrot what he has read in his book. It interests the pupils to have them change the declarative sentences of the history book to interrogative sentences. Do not ask your pupils, "Did X do so and so?" but "Why did X do so and so?" or "How did X do it?"

English is my hobby, and I suppose I ride it rather hard, for last year one of the students cartooned the faculty of the college and represented me as Moses with a revised Decalogue, but with five commandments instead of ten. These were:

"1. Write short sentences. No sentence may contain more than 30 words.

"2. Wherever possible use the active voice.

"3. Place the modifiers as near as possible to the words they modify.

"4. Secure balance by placing your subject, predicate, object, or complement as near the middle of the sentence as possible.

"5. Avoid the use of pronouns and indefinite expressions. Use nouns whenever possible."

The cartoon amused me, but I felt gratified that some of the pupils recognized the principles that I was trying to impress upon them.

I have spoken of metaphrasing as a means of acquiring a vocabulary, and I wish to speak of the value of paraphrasing as a means of self-expression. In my own experience I remember being required to paraphrase Goldsmith's Deserted Village, and I think the experience one of the most valuable lessons in English I ever had in high school. For the deaf, Hiawatha is an excellent poem to paraphrase and to ask questions about. Many words are repeated so often that a pupil soon acquires a vocabulary without looking up too many new words, a process extremely tiresome in the translation of a foreign language.

Other valuable exercises are the changing of compound to complex and simple sentences, and the expansion of the simple sentence to the compound and complex sentence, the changing of words to clauses, of dependent clauses to phrases, and the changing from the passive to the active voice.

The last catalogue of the college states very definitely what is expected in English composition of the pupil who is preparing to enter college. He is expected to have a knowledge of the ordinary forms of capitalization and punctuation. The examination paper in English composition aims to be a test of the pupil's understanding and of his ability to express himself intelligibly. He is usually given an article to read, taken from the textbook in history which he will study in the fall. He is asked to reproduce this article and to ask or to answer questions based upon it. He is also asked to do some original work, such as writing a telegram, a letter, a description of some

person or place, or an explanation. He is usually asked to show that he is able to transform elements.

Let me emphasize again the importance of forming good habits of writing in your pupils when they are young. We all have habits which we formed in childhood, habits of speech that cling to us all our lives. How grateful we should be to-day if some harsh teacher in the distant past had eradicated our ill-formed habits when we were young.

Dr. HALL. We have a few matters of business, but I think if there is no objection you will allow me to grant a few minutes to Mrs. Anderson for a short statement about the normal work done in the State of New Jersey. It may give some valuable ideas to superintendents and teachers here. Mrs. Anderson, we will give you a few minutes.

Mrs. ANDERSON. For 12 years I had under close observation an idiot savant—a deaf boy to whom we could teach anything we wished. And in that time I learned that the real problem of educating the deaf depends not upon the course of study but upon the teacher.

The course for training teachers of the deaf at the New Jersey State Normal School was adopted in October, 1918, but not put into operation until this past year. It is a 2-year course. Just what it covers will be seen from the following:

NEW JERSEY STATE NORMAL SCHOOL—COURSE FOR TEACHERS OF THE DEAF.

[The number following each title indicates the periods per week devoted to the subject.]

JUNIOR YEAR.

First term—20 weeks.

Psychology	3
Arithmetic	3
Biology	3
Drawing	2
English	3
Music	2
Penmanship	1
Physical education	2
Observation and practice	4
Preparatory education of the deaf	1
Special subjects relating to the deaf	1

Second term—20 weeks.

Psychology	3
Arithmetic	3
Biology	3
Drawing	2
English	3
Music	2
Penmanship	1
Physical education	2
Lip reading	1
Observation and practice	4
Special subjects relating to the deaf	1
Speech	1

SENIOR YEAR.

First term—20 weeks.

Educational measurements	2
Observation and practice	8
Reading and spelling methods	3

School management	3
Manual training	2
Music	2
Physical education	2
History of the education of the deaf	1
Language	2
Speech	1

Second term—10 weeks.

History of education	3
Principles of education	3
Cooking	4
Industrial arts	4
Physical education	4
Sewing	4
Academic education of the deaf	2
Observation and practice	2

The subjects named above are studied for either the first or the last 10 weeks of the term; the other 10 weeks are devoted to practice teaching.

Special emphasis will be placed on such phases of the work as are particularly valuable to teachers of the deaf.

The important points to educators of the deaf are that New Jersey trains teachers of the deaf without cost to the teacher, and that the director of the course, who is principal of the academic department of a school for the deaf, is a recognized member of the faculty of the New Jersey State Normal School.

All the work for the deaf that requires classroom demonstration is given at the school for the deaf. The balance of that directly connected with the education of the deaf is given at the normal school. The cooperation between the two schools is very close. From the very first the girls in training—there are only three this year—are in the school for the deaf at certain periods during the week. The aim of the first year's observation and practice is to familiarize these girls with the unusual environment in which they, as teachers of the deaf, are going to live, and with the progress that it is possible for deaf pupils to make.

The members of the training class observe deaf pupils in the schoolrooms at certain times and not again for several months. Thus they note the changes that take place in the deaf child in even a short period of time.

Another important thing is that the students in training are required before they leave school at the end of their senior year to teach not only in the school for the deaf but in the school of practice connected with the normal school, where they are instructed by critic teachers in modern methods of teaching hearing children.

The course for training teachers of the deaf is so organized that the students selecting it may take one-half year additional at the normal school and receive a certificate to teach in the public schools for hearing children, or, if they prefer, may continue to take courses at the normal school while they are actively engaged in teaching the deaf and receive the general certificate for grade teachers upon the completion of the equivalent of one-half year's work.

In 1921 the State of New Jersey will certificate all teachers of the deaf in New Jersey schools, but until such time as the certificate is granted the State board of education requires of each teacher (not holding a State certificate or not a normal-school graduate) in the school for the deaf three hours attendance per week at the normal

school or a school of equal standing. This is done in order that the teacher may grow along the line of new thought in education.

The New Jersey State Normal School is endeavoring to train its normal students to teach not only in the classroom for the deaf but to correct speech defects in hearing children.

The only hope of securing more high-school graduates—only these are eligible to take the training course—lies not in the offer of higher salaries, but in arousing interest in teaching the deaf. This is now being done by demonstrations of work before each graduating class from the high school. The class visits the school for the deaf and are shown the joy that teachers and pupils find in the work.

Dr. HALL. Mr. Jones, did you have an announcement to make?

Mr. JONES. Not at present; no.

Dr. HALL. The remaining business of the session consists in reports of committees with resolutions, etc.

Are there any committees that have not yet reported and who wish to present a report?

Dr. Rogers, I believe, is chairman of the committee on resolutions, so I will ask him to take the platform and present the report of that committee. The committee presents the following resolutions:

RESOLUTION 1.

Resolved, That the thanks of the members of the Convention of American Instructors of the Deaf, the American Association to Promote the Teaching of Speech to the Deaf, and the Society of Progressive Oral Advocates, in joint session, be, and are hereby, tendered to the Hon. A. R. Montgomery, president, for his cordial welcome, and to the board of directors of the Pennsylvania Institution for the Deaf for the most generous and hospitable entertainment provided during each and every session.

RESOLUTION 2.

Resolved, That the members of this convention express thanks and grateful appreciation to Dr. and Mrs. A. L. E. Crouter and their entire staff of teachers, matrons, and officers for their genial hospitality, their many acts of courtesy, their constant attention, and their untiring efforts to provide for our comfort, pleasure, and entertainment during this splendid, interesting, and profitable convention.

RESOLUTION 3.

Be it resolved, That the thanks of the members of this joint convention be tendered to Dr. Percival Hall, for the fair and impartial manner in which he has conducted the meetings of the convention.

RESOLUTION 4.

Be it resolved, That the most sincere thanks of the convention are due and are hereby tendered to those who have so faithfully and ably interpreted the proceedings of the convention to the deaf members present.

RESOLUTION 5.

Be it resolved, That we hereby tender our thanks and appreciation for the presence of charming childhood and the demonstrations which have added so much to the interest and value of the meetings, and herewith express our gratitude to the school, the teachers, and the children to whom we are thus indebted.

RESOLUTION 6.

Be it resolved, That the thanks of the members of the convention be tendered to the press of the city of Philadelphia for adequate accounts and notices of the proceedings.

RESOLUTION 7.

Be it resolved, That we express our sincere thanks for the very able and helpful addresses of the Hon. A. G. Cattell, on "The Historic City of Philadelphia"; Dr. Rudolph Pintner, of the Ohio State University, on "Standardization of Schools for the Deaf"; Dr. Edmund B. Twitmyer, of the University of Pennsylvania, for his lucid discussion of the subject; and Dr. H. H. Goddard, director of juvenile research work, Columbus, Ohio, on "Training of Backward Children."

Resolved further, That we are duly thankful for the pleasure that has been ours in being the guests of the honorable board of directors of the Pennsylvania Institution for the Deaf and Dumb and its beloved superintendent, Dr. A. L. E. Crouter, on the occasion of the one hundredth anniversary of this splendid school, and to have had the privilege of hearing the eloquent and inspiring addresses of Dr. Albert L. Rowland, of the State department of public instruction; Dr. Charles M. Jacobs, of the Lutheran Theological Seminary; Rev. James A. Montgomery, Ph. D., of the University of Pennsylvania; His Excellency Gov. William C. Sproul; his honor, Mayor J. Hampton Moore, of the city of Philadelphia; the Hon. George Woodward, M. D., State senator; and the Hon. Edward S. Stuart, ex-governor of Pennsylvania.

Resolved further, That we join our hearts with theirs in the hope that the future of the Pennsylvania Institution for the Deaf and Dumb may be better, brighter, and more glorious still than its past, if that be possible—that for this great school "the best is yet to be."

Mr. DRIGGS. Mr. Chairman, I move you that the resolutions just read by Chairman Rogers be adopted by a rising vote.

(The motion was seconded, put, and carried by rising vote.)

Dr. HALL. It is passed unanimously.

Mr. JONES. Mr. Chairman, I have one more resolution. You have it also I am sure. I made the resolution, moved its adoption, and unanimously carried it in my own mind and heart, and it is that this is the best convention that the profession has ever had. It is the largest, not only in numbers but it is the largest in spirit. It is the richest not only in program, but it is the richest in brotherly love [applause], and we shall all go to our homes feeling that it is good to have been here.

So much of it is due to Dr. Crouter and those who worked with him that it is not out of place to emphasize it.

Twenty-four years ago, when I made my first visit to Mount Airy and met Dr. Crouter for the first time, I came expecting to see a very different man from what I found. We are always influenced by what we hear. I was expecting to find a man hard to approach, but in place of that with his head in that characteristic pose, his chin slightly lifted and his eye looking directly into mine, he greeted me most cordially and made me feel at home. He assured me that he was very busy, being the host to such a large convention, but he was going to see that I was taken care of. He introduced me to a number of superintendents and asked them to look after me. From that day forth I have loved Dr. Crouter. [Applause.]

I wanted to say this on last Thursday night when I presided, but I made the terrible mistake of beginning by saying he was then a single man, when he had a nice wife and baby. After that I could make no further headway. [Laughter.]

I have depended upon this school greatly in directing the Ohio school, and I never came here but what I met a welcome, this warm response and this disposition to help, even when I came to try to get one of his very best teachers. Many years ago I was allowed $1,050 for a supervising teacher of speech and lip reading—and in that day

it was a very good salary. Dr. Crouter handed me over the list of his faculty and said "Take any one that you can tempt to go with you." I went through the school and saw it from beginning to end. Just a few days ago in a drawer I found my old red-backed notebook in which was a record of every class I had visited. Miss Christmas, in charge of small pupils 5 to 6 years of age, doing excellent work. Fine teacher. Notes on the work she was doing.

Miss Throckmorton, in charge of pupils 8 to 10 years of age. Doing excellent work. And I remembered that I tried to tempt Miss Christmas with my $1,050. I couldn't do it. Then I tried to persuade Miss Throckmorton to take charge of the speech work in the Ohio school, but she liked Mount Airy too well. The little salary I had to offer was not so bad in comparison. It was equal to about $2,500 to-day.

But we are all depending upon the Pennsylvania school for inspiration, for methods, and for leadership. We have seen clinging to this great heart in Dr. Crouter a working force which would not be drawn away. His organization is so compact and effective and the spirit of the work so beautiful that it can spring only from a great soul.

And we see by his side Mrs. Crouter, bright, interesting, helpful, and always doing good things. She is no small factor in the school. And there is a large family of sons and daughters, well educated, all at work, every one helpful, all interested and warm-hearted, making us feel at home. I can see many reasons why Dr. Crouter should be one of the happiest men in the world, and I believe he is.

When the committee on efficiency met in Columbus, one of the teachers of a backward manual class did not wish me to take Dr. Crouter to her school. I assured her that she would find him a pleasant visitor, and above all things I wished her to know the real Dr. Crouter. When we went into her class he asked permission to tell the children a story. She then learned that he could not only sign, but that he was one of the most beautiful signers in the whole profession. Both teacher and pupils were interested.

Now she greatly admires Dr. Crouter as all people do who know him. The secret of his greatness is in the universality of his heart, reaching out to all people and to all classes and to all phases of our work.

Dr. CROUTER. Mr. Chairman and friends, I am unable to control my emotions. The kindly expressions of your sentiments, your universal courtesy, your appreciation of what has been done by the institution during your presence is to me overwhelming. I love all of you. I love the work, I love the deaf, and all interested in their behalf.

Mr. Jones in his remarks made one mistake this morning. It was in connection with my family. While I have an interesting family, I can not lay claim to nine children. I have seven—all of them interesting, and to me, and I hope to all of you who have met them, very lovable—four boys and three girls.

Mr. Chairman, there is much that I would like to say, but I feel that time is pressing. This convention has been a source of the greatest pleasure to all the members of the staff of this institution, to its board of directors, and to all connected with the household

department. I wish to make public acknowledgment at this time of the loyal, helpful, courteous attention that has been given by all members of the staff, by the members of the household department, and all who have been called upon for service; their time, their thought has been yours. [Applause.]

The thought of holding a convention here, when it first occurred to my mind, gave rise to some fears, to some trepidation, regarding the possible outcome. I knew that there was before me the celebration of the centennial anniversary of the founding of the school. I knew that in my heart I desired to bring together all teachers, all shades of conviction as regards methods, but just how to do it and to get you here and to have a harmonious and happy and helpful time was what gave me considerable concern. You have come. A spirit of harmony has brooded over all of your deliberations, and I wish to express from the bottom of my heart my great appreciation of your courtesy, your helpful suggestions, and your kindness and forbearance during all the sessions of the convention. [Applause.]

Mr. JONES. The reason I made that mistake was they looked so good to me that I sometimes think they are even a thousand. [Applause.]

Dr. HALL. There seems to be no further business before this joint meeting, and so I now declare this wonderful joint meeting of our three associations adjourned.

(Whereupon, at 12.10 o'clock p. m., the convention adjourned.)

LANGUAGE DEVELOPMENT FOR PRIMARY GRADES.

By MABEL K. JONES.

FIRST YEAR'S WORK.

I wish I were about to point out some magic road to language for the deaf, a road not uphill all the way, but I have never discovered one. The only road I know is the old one. It isn't magic, but it is so good that every time I travel it I am filled with admiration for those who have done so much to make it as safe and sure as it is.

In the three days devoted to language development for primary grades we can do no better than to travel along this well-worn road, devoting one day to each of the first three years.

In many schools the children enter so young that it is necessary to have a preparatory year given chiefly to kindergarten work, sense training, tongue gymnastics, babbling, and lip reading. Only a small vocabulary is acquired, and very little regular language work can be done.

In the discussion to-day I am talking of a class of children mature enough to do regular first-year work.

Even with such a class the importance of sense training can not be overemphasized. The more the eye is trained to quick and minute perception the better the speech reading will be. The more highly the sense of touch is trained the easier it will be to get pleasant voices and good articulation. The same exercises, properly used, furnish excellent training in imitation, memory, and attention. A class that has had a thorough, carefully planned course of sense training has acquired a mental development that will make all their work move faster and more smoothly later on; but if we are to get the best results the work should be carefully planned and adapted to fit the special needs of our particular problem.

Some of the Milton Bradley and some of the Montessori materials can be excellently adapted to special sense-training work for the deaf. If these are not available, there are many things that can be made by the tireless and ingenious teacher.

The great forerunner of language work for the deaf child is lip reading. It begins the first day of school, and from that day all the way through his school

life it goes on ahead, breaking the road, preparing the way for the vocabulary or language principles to follow.

We are all perfectly familiar with the early commands, "Walk!" "Run!" "Jump!" "Sit!" "Stand!" and the first objects used for lip reading—a ball, a top, a car, a shoe; and so before the end of the first month in school the child has learned that things have names; that there is such a thing as language. At the same time, through tongue gymnastics, he has gained some power in the voluntary control of that unruly members. He has acquired six or seven elements. He gives these elements from imitation, reads them in script, and recognizes them in diagrams drawn on the blackboard.

Second month.—In the second month the lip reading grows according to the ability of the class, until by the end of the month the children can take about 20 commands and at least an equal number of nouns.

They can say several consonants and at least the vowels ar and $\frac{1}{oo}$. They can read these elements from diagrams and script and write them from dictation.

The teacher can now begin to build up the element charts, placing the elements taught in the position they will occupy on the completed chart and leaving spaces for untaught elements.

The children should read and write any combination of these elements:

par, tar, arp, art, parp, $\frac{1}{poo}$, $\frac{1}{foo}$, $\frac{1}{oop}$, $\frac{1}{oot}$, $\frac{1}{oof}$, etc.

Among the possible combinations there are several words—a top, a thumb, a car, a cow, a tooth. So we can say that spoken language begins in the second month.

From the very beginning, words should be given from lip reading. They may be written as combinations, among other combinations, for purposes of preparatory drill, before they are given as words; but when a word is given as a word it should be—

First, spoken by the teacher;

Second, spoken by the child;

Third, written by the child phonetically;

Fourth, the correct spelling (if it is not phonetic) written by teacher slowly and impressively.

The teacher who writes the word first or at any time hastily resorts to writing is surely bringing up a class of poor lip readers. "Lip reading first" should be our slogan in language teaching. It is slower in the beginning, but it pays in the end.

It would never do to have a rule without a few exceptions. Here follows the first exception. Early in the month the children's names are written on the blackboard by the teacher. It is worth breaking a rule to give the child the sense of individuality which the possession of a name peculiarly his own brings.

Third month.—The third month is a month of combinations—combinations read and written by the children every day and twice a day; every consonant taught, combined with every vowel taught; initial consonants; final consonants; vowels between two consonants; combinations forming words, and combinations for drill only.

Before the end of the month the element charts have, of course, grown considerably.

We have several voice consonants, the long vowels, three or four diphthongs, and at least the short vowels, -u- and -a-.

With all these to work upon, the combinations should be varied, and from the combinations grow more words.

Calendar work is begun in this month. The children cross off each day as it passes, pointing to them as the teacher says, "Yesterday," "To-day," and "To-morrow." The names of the days are written on the blackboard, crossed off, and shown to be the same as the days on the calendar. From this time on a few minutes each day is given to calendar work.

Fourth month (December).—Some of the lip-reading commands, which have continued every day since the first day of school, should by this time include the names of objects, as "Give the book to me," "Put a top on the floor," "Throw a paper into the basket," etc.

The element charts continue to grow, diagrams are constantly used, and tongue gymnastics are a part of every day's program.

Work on combinations continues with unabated zeal. Children read combinations which prepare for sentences, as:

i-e doo not no-e.

hou doo u-e doo.
ma-e i-e go-e.
i-e faw got.
good bi-e.

Before the end of the month the children say:

I know.
May I come?
May I have some water?
I love you.

Work on to have is begun, using only "I have" and "You have" for several lessons.

Print is introduced at this point. Children enjoy reading familiar words in print instead of script.

Fifth month (*January*).—In lip-reading commands two objects should be included—i. e., "Put a pencil and paper on the chair," etc.

Children learn the names of common articles of food, as:

Some bread.
Some butter.
Some cake.
Some milk.
Some meat.

They learn to say, "May I have some bread?" etc.

They learn to speak the names of their classmates. Each name is written phonetically and first drilled upon. They learn to count to 5 at least.

Naturally, work on plurals of nouns follows:

Action work, using the "five-slate system," should begin in this month:

I ran. We ran.
You ran (spoken only).
I fell.
I coughed.

Work on to have continues.

A boy has------
Mary has------

and somewhere in plain sight should be written:

I have. We have.
You have. You have.
A boy has. The girls have.
A girl has.
A dog has.

To give varied drill in the use of the verb to have, many teachers use simple pictures.

A baby has a ball.
A girl has two dolls.

The end of January brings us to the end of the first term's work. The slower division of the class which I observed at Northampton had at this time of the year 12 verbs, 45 nouns, and 3 pronouns—I, you, we—while the brighter division had 18 verbs, 61 nouns, and the pronouns I, you, he, she, and we.

Sixth month (*February*).—By this time children will be able to take double commands in lip-reading.

The lip-reading dictation should include elements, combinations, nouns, and sentences.

As soon as children begin action-work, using the "five columns," the teacher should begin to dictate, as a lip-reading exercise, sentences, using the same vocabulary as that taught in action-work. These sentences should be written without using the columns:

A dog ran.
A cat saw a bird.
James has a red ball.

For lip-reading, besides being a forerunner, is our best means of following up the language taught.

Action-work continues and the pronouns he, she, it, and they are added to the vocabulary.

"Who_____?" is written over the first column from the time action-work is begun, and the teacher constantly asks the question.

The new subject appearing on the program is "Journal."

The first journals are, of course, so simple as hardly to deserve the name. If no interesting event occurs the teacher should help Providence out by creating one. Something different, something interesting, will make the journal popular.

A first journal written in Miss Leonard's class reads:

We went to walk.
We saw a frog.
We saw some flowers.

I think most of us used to include some of our calendar and weather language in our journals. The journal used invariably to begin: "To-day is Monday. The sun is shining," or "It is raining," or any other interesting remark on the weather. But now, unless there is something remarkable about the state of the weather, it is not considered good form to mention it in the journal.

Calendar language and weather language must be taught as of yore and a period is given to it each day.

In this month children should begin to learn to say the names of the days of the week, drill on them being first given as phonetic combinations.

Seventh month (*March*).—In the speech-reading commands, numerals and colors should be included.

In lip-reading, dictation of sentences, the colors, and numerals should occur. Two sentences should be dictated at a time.

In articulation, the names of the days of the week need special drill and also yesterday, to-day, and to-morrow.

In action-work, three columns are used and the pronouns him and her are taught.

The past form of the verb to have is taught and children conjugate it.

Work on the verb to be is begun. It is used with adjectives only in the first year.

The interrogative pronoun "What" is written over the third column, and teacher asks "What have you?" "What did you see?" "What did John carry?" etc. On the blackboard should be written:

What_____?{a book. / a pencil. / a knife. / a doll.

Eighth month (*April*).—The lip-reading commands should, as far as possible, include the adjectives which the children are learning. "Put the hard ball into your pocket and throw the soft ball to_____" "Put a large book on your chair and sit on it," etc.

A week, a day, a month are read on the teacher's lips and pointed out on the calendar.

All action-work is constantly reviewed by means of lip-reading dictation.

In action-work, use five columns, teach the pronouns us and them, and begin the possessive pronouns.

The children should be able to speak and write the names of the days of the week and should give the long answers to the questions:

"What day is to-day?" "What day was yesterday?" "What day will to-morrow be?"

The teacher should use the future tense at every opportunity.

To vary the work the teacher may close her eyes while each child selects an object and holds it behind him. She may then ask:

"Have you a doll?"
"No."
"Have you a knife?"
"No."
"What have you?" etc.

Ninth month (*May*).—Speech-reading and dictation continue as in the previous month.

The children learn to answer, and very soon to ask the questions:

What color_____?
How many_____?

Beginning question-work should be for information. The children love to play question games, and from them they learn the real significance of a question. For instance, in teaching "What color____?" the teacher may hold

several marbles of different colors in her lap. She may close her eyes and let each child take one. Then when she opens her eyes a child says, "I have a marble." The teacher asks, "What color is it?"

On the blackboard, at the beginning of the lesson, she should have written:

What color_____? { red. / blue. / green. / brown. / etc.

"How many_____?" may be taught by a similar game. Children may take a number of marbles while the teacher's eyes are closed. She then asks, "How many marbles have you?"

On the board is written

How many_____? { one, / two, / three, / four, / five, / etc.

The children very soon begin to clamor to be allowed to take the teacher's place and ask the questions.

After the question idea has been grasped, drill in answering oral and written questions follows.

The future tense is used by the children. The teacher foretells future events and encourages the children to do likewise. A journal in the future tense may be devised. The future of all verbs is added to the verb form. The form now stands:

ran_____ { shall run. / will run.

did not run_____ { shall not run. / will not run.

Simple descriptions of objects furnish a means of teaching adjectives and drilling on the verb *to be* at the same time.

Tenth month (June).—The last month of the year is left open for review.

These are a few of the things that will need thorough drill:

1. Verbs, negative and affirmative forms.
2. To have, using elliptical sentences, conjugation, pictures, etc.

To be, with adjectives, using elliptical sentences, description, conjugation.

Pronouns—nominative, objective, possessive, using action work and elliptical sentences.

Questions asked by teacher:

Who _____?
What _____?
Where _____?
How many _____?
What color _____?
Have _____? Has _____?
What is your name?
How old are you?

Questions asked by children:

May I have some _____?
How many _____?
What color _____?
Have _____?
Has _____?

Calendar work:

Names of days.
What day is to-day?
What day was yesterday?
What day will to-morrow be?

At the end of the year an average class with an average teacher should have between 125 and 200 nouns and between 30 and 40 verbs; all pronouns—nominative, objective, possessive; between 18 and 25 adjectives and 3 or 4 prepositions.

However, a large vocabulary is not the important thing. A small vocabulary, easily and fluently used, is far more to be desired than a large one used with difficulty.

The outline which follows (pp. 602 and 603) is given more as a basis of discussion than anything else. It might work very well under certain conditions, but not under others. The conditions in schools are different; classes vary and teachers have their own methods of approach. No plan for a year's work can become a fixed law, but, on the other hand, on this personally conducted tour the conductor must have a very clear idea of the road and be sure of the goal. The time schedule he can more easily change to suit the strength of his party.

Teacher's outline of work, September to June.

September.	October.	November.	December.	January.
Sense training.	*Sense training.*	*Sense training.*	*Sense training.*	*Sense training.*
Matching colors	Texture	Picture matching.		
Geometrical solids	Tablets			
Reproduction of outlines	Weighted balls	Vibration	in guitar strings compared to voice.	
Number objects.	Number cards.			
Lip reading.	*Lip reading.*	*Lip reading.*	*Lip reading.*	*Lip reading.*
Commands		include objects	using as many objects as possible.	two objects in one command.
Objects				
	Elements written from dictation			
		Combinations written		
		Words written		
			Color	
			Objects of different color	
Articulation.	*Articulation.*	*Articulation.*	*Articulation.*	*Articulation.*
Tongue gymnastics				
Diagrams				
Elements				
Babbling				
	Combinations			
	Words			
			Conversational language	
			Counting	
				Language.
	Children recognize their own names on the blackboard.	Calendar work begun.	Print begun.	Action work (2 col.). To have (3 col.). Plurals.

Vocabulary at end of term, 40 to 50 nouns, 10 to 16 verbs, pronouns I, you, we.

February.	March.	April.	May.	June.
Lip reading.	*Lip reading.*	*Lip reading.*	*Lip reading.*	
Double commands...	include colors and number.	include adjectives.	.....	General review.
Objects.....	.....	.....	.....	
Elements, combinations, and words written from dictation.	.....	.....	.....	
Days of the week.....	.....	a week, a day, a month.	.....	
Sentences written from dictation.	two sentences dictated at once.	.....	.....	
		Teacher uses future tense.		
Articulation.	*Articulation.*	*Articulation.*	*Articulation.*	
Tongue gymnastics..	.....	.....	.....	
Diagrams.....	.....	.....	.....	
Elements.....	.....	.....	.....	
Babbling.....	.....	.....	.....	
Combinations.....	.....	.....	.....	
Words.....	.....	.....	.....	
Conversational language.	.....	.....	.....	
Counting.....	.....	.....	.....	
	Days of week, yesterday, to-day, to-morrow.	.....	A week, a day, a month.	
Language.	*Language.*	*Language.*	*Language.*	
Action work.....	3 columns.....	5 columns.....	.....	
Plurals.				
Pronouns...{he, she, it, they,	}him, her, it.....	us, them.....	.....	
Questions (Who..?)..	What....?	Where....?	How many...? What color...?	
Negative of verbs; to have conjugation... present.	..... past..... to be with adjectives.	..... future..... conjugation: present.	..... past, future.	
	Possessive case of nouns.	Calendar questions. answers.	Description of objects.	
Journal.	Journal.	Journal.	Journal.	

Vocabulary at end of first year: 125 to 200 nouns; 30 to 50 verbs; all pronouns, nom., obj., poss.; 18 to 25 adjectives; 3 to 5 prepositions.

SECOND YEAR'S WORK.

At the beginning of the second year the inexperienced teacher is sure to have the feeling that her class has been very much overrated, and she may even cherish a few unkind thoughts about the work of her predecessor.

But if the second-year teacher has been through the mill several times, she simply begins a vigorous review, realizing that first-year children always do a deal of forgetting, especially if the people at home do not speak English or do not take the trouble to help the little one.

If the child has taken home a yearbook showing what he has learned, he will have forgotten much less than if he has gone empty handed into two months of riotous living. The yearbook educates the family at home as well as refreshes the memory of the child.

In reviewing, go back if necessary to the beginning of action work and build up quickly, following as nearly as possible the route used in the original teaching. The pronouns will need very special drill. The verbs "to have" and "to be" in the three tenses, negative and affirmative, will need a careful review and much work throughout the year.

The subdivisions in language on the program for this year bill be:

Calendar work.
Journal.
Composition or topic.
Letters.

Action work.
Language stories.
Lip-reading stories.
Chart stories.
Verb drill.
To have.
To be.
Questions asked and answered by children.
Vocabulary.

The calendar work is of necessity cut and dried. We have the names of the days of the week. We must add the months and seasons, this year, last year, next year; and the days of the month. "How many months in a year? How many seasons? How many months in a season?" etc.

The journal becomes more imposing. At first the journal is usually a class exercise. From the material suggested by the children select what is best to be used. After the whole has been written on the blackboard, let the children read it over several times. Then have it erased and let them reproduce it from memory. The language in it has then become their own.

Journals which are neatly copied into notebooks from the blackboard look very nice, but they represent little mental effort, and hence the minimum amount of gain.

Paragraphing should be begun at once.

Many times the teacher can bring about an event which will teach or review certain language which the class especially needs.

The reproducing of a set journal day after day should be discouraged. As soon as an expression has become merely a memorized form which the child uses week in and week out to pad his journal, it is time to discontinue it. The children soon get the idea that only items of real interest are to become part of the journal.

The individual journal is used more and more frequently as the year advances, but if at any time there comes a wave of mistakes in language, or of dull, uninteresting subject matter, the class journal should be resumed for a while.

If there are enough blackboards so that each child can have a space in which to write his journal, the children will draw inspiration from one another.

Composition or topic.—Descriptions of objects, birds, or animals from the nature cabinet, things which the children bring, will furnish a variety of language. For instance:

John's coat: John wore a new coat to school this morning. It is dark blue. It has three pockets. It has pretty buttons. It is warm. We like it.

Or,

A bird: Miss ——— brought a little bird to our schoolroom this morning. It is not alive. It is pretty. It has a soft brown feather. It has bright eyes. It has a short bill. A long time ago it lived in the country.

The sort of description that enumerates the number of feet, eyes, ears, noses, and tails possessed by a given animal may be necessary while the children are acquiring vocabulary, but should be discontinued as soon as possible.

Action work should be continued throughout the year. Nearly all the language taught in the second year can be put in the six columns without too fine analysis.

Doubtless you are all familiar with Miss Barry's book entitled "Barry's Five Slate System," which develops the method step by step.

Language stories.—The language story is a medium for teaching new language. The new language is the kernel. The story is wrapped around it to make it palatable. It is one of the best means we have for the systematic presentation of language step by step, principle by principle.

Beginning with the second year the class should have a language story every week. These stores should be carefully graded in length and difficulty. The first stories will consist of not more than three or four sentences. The steps used in teaching a language story are:

Lesson I. Teach the new words that will occur in the story. Have pictures ready if they are needed. Give the new words orally and have children write them phonetically. Teach new verbs by action work. Tell the story as a whole. Talk about it. Dramatize it. Ask a few oral questions to see if they have the idea.

Lesson II. Tell the story twice. The first time allow the children to interrupt if they do not understand. The second time tell it without interruption. Send children to their desks to write it. If they can not remember it or do not follow

a proper sequence of ideas, let the class give the verbs in order, write them on the blackboard, and leave them for reference. It helps toward clear thinking in the early stages of language story work, but before the end of the year they should be able to do their own thinking without this help.

Have a hectographed or printed copy of the story ready for each child. As they finish let them take the copies and correct their own mistakes, handing the corrected copy to the teacher. The hectographed copy is the home work or study-hour work for the day. It should be memorized.

Lesson III. Have the children reproduce the story in exact words of the text from memory. Give verb drill. Write new verbs in verb outline and conjugate.

Lesson IV. Children ask questions on the story. In the beginning of this work write the first sentence in the five slates. Have children read it. Erase the word in the first column. Point to the question "Who ———?" over the column and have the class ask, "Who ———?" Replace the first word and erase the third. The question will then be either "What ———?" or "Whom ———?"

Show them that when the question comes from any but the first column the verb must be changed and "gave" will become "did give," etc. Proceed in the same manner with the second sentence, and so on. Soon the children should be able to ask the question when the answer is given.

Lesson V. Teacher asks questions on the story. It is well to go over the questions orally before having the children write the lesson. At first these questions must be the much-condemned "foolish questions," the answers to be found in the text. As soon as possible the questions asked by the teacher should require thought and reasoning as well as mere question drill. In the second year the short answer to all questions is necessary; otherwise the answers to four or five questions would often be the same.

Speech-reading story.—The purpose of the speech-reading story is practice in speech reading and the reviewing and fastening of language forms already taught. If they have told the story sensibly, it passes, even though the language is not exactly the same. It should be a pleasure, not an agony. Work the class up little by little until they take their stories easily.

We have all met the child who sinks down in a blue funk the minute he knows he must take a story from the lips. It is a locked state of mind that it is almost impossible to overcome. It often comes from plunging too quickly into too long or too difficult stories. If we can give the children confidence, make them feel that speech reading is easy, half the battle is won. The minute they are allowed to lose confidence and feel that it is hard or that they can not do it the door is shut in our faces.

The chart story.—The purpose of the chart story is to make our children want to read, to give them the joy of a real story. It is every child's birthright to have the good old fairy and folk stories at the age when they enjoy them. If we wait until our children can read them from books written for hearing children in idiomatic English, they are too old to enjoy that type of story. By rewriting them in language which they can comprehend they can have them at almost the normal age.

The first stories are very simple, but before the end of the year the class should have had such stories as The Three Little Kittens, Peter Rabbit, Goldilocks, and Little Red Riding Hood.

The chart is hung on the wall before the class. The children read silently, following the teacher's pointer. A few explanations are made, if necessary, but the children are encouraged to get the ideas out of the language, even though there be forms that they have never seen before. In this way they are prepared to use books; otherwise they are inclined to close the book in utter discouragement at the sight of an unfamiliar word or expression.

Chart stories do not take the place of books, but they lead toward books and prepare the child to use them intelligently.

At the close of a chart story lesson the teacher may ask a question or two to make sure that the idea has been grasped, but the child must not be required to give back much. The joy of the story should remain undimmed.

Verb drill.—Verb drill is a very important part of second year's work. At the close of the first year the class have the past, past negative, future, and future negative of all their verbs. Gradually in the second year they fill out their verb outline until they have nine forms, thus:

Past.	Present.	Future.
	run.	shall run.
ran.	runs.	will run.
	do not run.	shall not run.
did not run.	does not run.	will not run.
	Do run.	Shall run.
Did run.	Does run.	Will-run.

Time phrases must be associated with the tenses from the first.

Calendar work is always closely connected with verb work. The children must conjugate the verb in all the forms included in the outline. They must fill in elliptical sentences. The little box device used as a verb outline is to the verb what the five slates is to language. If it is firmly rooted in the child's mind, it helps him keep his verbs straight as he learns them and is an easy means of correcting mistakes later on. Drill with all verbs using the two-line device is also helpful, as

ran	did run	runs
did run	ran	does run

It serves for either the negative or question form.

Soon after the middle of the second year, work on the present progressive tense begins. It is best to start it as action work, using the five columns. Make sure that the action continues until it has been written and spoken. Then as soon as it ceases change the form of the verb to the past. A verb with plenty of action in it conveys most picturesquely the first idea of present progressive.

"Mary is washing her hands."

appeals more than:

"Mary is sitting in her chair."

When the idea has been grasped, pictures can be used. The first pictures should be simple, containing one distinct action. Later they may contain two or three actions, and still later picture description should be used in the topic or composition period.

NOTE.—Pictures are sometimes used in a way that seems entirely wrong to me. For instance, before the present progressive is taught, the children use the past tense to describe a picture, saying, "The baby cried," when "The baby (distinctly) is crying."

If pictures have been used in that way the present progressive tense will have lost its significance. If care is taken in presenting the tenses one by one they should stand out distinct and clear cut.

The verbs "to have" and "to be" should receive special care throughout the year. The box device will help to impress them on the mind.

The two-line device calls the child's attention to the fact that the verb "to be" is peculiar. It has only one line, as

"was	were	is" etc.
/	/	/

To write "did-was" is to make oneself appear ridiculous in the eyes of the world.

Questions have a very large and important place in second year's work. The children must learn to both ask and answer many questions. They must use the question forms:

Is it—or—?
Are they—or—?
Whose ———?
Where did—get—?
How much did ———?
What shape ———?
What is—made of?
What happened ———?
What kind of ———?
Can ———?
Why ——— ? Because ——— ?

Besides the five-column questions:

Who ———?
What did—do?
What ———?
Whom ———?
Where ———?
To whom ———?
When ———?

The personal questions:

What is your name?
Where do you live?
How old are you?
What is your father's name?
How many brothers have you?

Etc.

The hidden object is a question game that calls for many question forms and is a never-ending source of delight; or

"I know a boy," will bring out another set of questions; or

"I am thinking about an animal," will bring out many questions in the present tense. A photograph arouses curiosity and brings good questions.

The teacher should constantly watch herself to see that she does not accept a statement when a question is intended. The children too often make a statement and a questioning look take the place of a question.

Present progressive questions begin soon after the children have grasped the idea of the tense.

When beginning work on the present progressive the teacher should take care to change the "What did —— do?" over the second column to "What is —— doing?"

Pictures are a great help in present progressive question work. One way of using them for this purpose is to select 8 or 10 pictures containing simple actions, show them to the class, shuffle them, and allow a child to draw one. He then stands before the class holding his picture so that the others can not see it. The class asks: "Is a girl holding her doll?" "No." Are two kittens drinking milk?" etc., until somebody guesses right. Then he is allowed to select a picture and stand in front of his class.

Later the teacher may take a picture which the children have not seen and they may ask all kinds of questions, until they have drawn out a description of the picture.

Vocabulary.—The children in this year should learn the names of common fruits, flowers, vegetables, and animals. For this purpose they will need charts to use when the real objects can not be produced.

After they know the names of several animals the monotony may be varied by short lip reading descriptions, as: "I am thinking about an animal. It is small. It is gray. It has a bushy tail. It can climb trees. It eats nuts." Children guess the name of the animal. The same thing can be done with fruits, vegetables, and flowers.

At the end of the second year, the children should have a good working vocabulary and a clear understanding of simple sentence structure.

THIRD YEAR'S WORK.

Third year language work is a continuation of that of the second year. The same subdivisions of language continue on the program, but there are more question forms, longer stories, and more difficult language constructions. The only new subdivision is direct and indirect discourse which begins in the second half of the year.

Calendar work.—Little that is new, except an enlarged vocabulary of time phrases, is added to the calendar work in this year; but in order to keep what we have alive, we need two or three short periods each week. Such questions as "In what season do the leaves turn red and yellow?" "In what season does it snow?" "In what season do the birds build their nests?" etc., furnish drill both on the seasons and the present tense of the verb.

The children learn to tell "the day after" and "the day before" a given date. In the second term they learn to tell time, using a clock dial with movable hands.

They learn the table of time and the little rhyme "Thirty days hath September," etc.

Journal.—In the third year the individual journal is oftenest used. The children are encouraged to use their new language in their journals. The mistakes common to the class should be noted and taken up at the end of the lesson. There should frequently be short oral journals. Often the lesson will become a real conversation hour as the children ask questions of the speaker and one thing suggests another.

It takes a long time to write and correct journals, and I have heard teachers say that they did not believe in them. I do believe in them for many reasons. They give the children their best opportunity for self-expression. They test their ability to use language and to follow a clear sequence. They show the teacher the weak points in the language of her class. They help her to get nearer to the life and thoughts of the children. If the journals can be written on the blackboard, the children come to know about one another's lives, to share one another's joys and sorrows, and their interests and sympathies are broadened in many ways. This is especially true of the children in our public schools, who bring in daily so much of the color of their widely different walks of life.

I agree that the stereotyped journal is an abomination, but a journal which gives the child an opportunity for real self-expression is worth the time it takes.

Composition or topic.—At least one period a week should be given to this form of connected language. It is the teacher's opportunity to interest the children in all sorts of things, while at the same time they are led to use certain language which she has in mind. The composition may be a picture description or a topic suggested by the language story, some child's journal, or the season of the year. Picture descriptions give the best possible opportunity to use the present progressive tense; other topics call out the present tense. As a rule, it is best to have this a class exercise, which is reproduced by the children at the end of the lesson. Some teachers begin to have the children write stories from pictures in this year. There is no special harm in this, but I like to save it for the next year, teaching them in this year to hold to the facts, prefacing any deviation with "I think." There is no use in gobbling up the whole cake at once. The story writing can easily wait, and it makes a step in advance for the next year.

Action work should be continued throughout the year; if not every day, then at least two or three times a week. It is the rule by which the children construct their language, and it should be so much a part of them that they can resort to it at any time to correct their own mistakes.

If I had ever had any doubt about the value of 5-column action work, I should have been convinced by a 12-year-old girl who was put into my class to do third year's work. She had been in school (not our school) for six years, had good speech and a large vocabulary, but such mixed language that I hardly knew where to begin. I soon found that she knew nothing about the five columns. So we went back to the beginning of action work. She spoke and wrote with the columns forever in front of her. Gradually her language straightened out. One day she volunteered the information, "Before, in the other school, I made many mistakes every day. The teacher marked blue pencil, blue pencil on my paper. I did not know why. Now, I make mistakes. You mark. I know 1, 2, 3, 4, 5," pointing to the columns. If that girl had had 5-column action work from the first, she would not have been doing third year's work in her seventh year in school. She would have reasoned better and thought more clearly, for mixed language certainly makes muddled thinking.

Language stories.—The general method of teaching a language story is the same as that used in the second year. The language stories for this year are based upon Miss Sweet's "First Lessons in English," No. 2. The stories need not be the same, but the order of language development seems to be the natural one for the deaf child. In this book we find the following language to be taught:

"I. Games versus Toys.—We play games. We play with toys."

Let the children make lists of the games they play and the toys they play with. Show them that there is generally an article or a pronoun before the name of a toy, but the name of a game stands alone. Before the list of toys, write "We play with," and before the games "We play." For rapid drill, the teacher names a toy or a game and the child responds "played" or "played with" as the case requires. In this way the ground may be covered in less time than it takes to tell about it. An elliptical sentence lesson may follow, as: "Mary —— her doll yesterday." "Her brother —— football."

II. Language form. The infinitive.

The infinitive as object of such verbs as "want," "like," "try," learn," "know how to."

The infinitive with a subject, as: "John's mother wants him to be a good boy." "Harry's father taught him to swim," etc.

The verbs "to let" and "to help" taught as exceptions, "let"—to; "helped"—to.

The children should conjugate "to want to see," past; "to teach a boy to read," future with not, etc.

Later in the year the infinitive of purpose, answering the question "Why ——?"

III. The conjunction "but" contrasted with "and."

IV. The inverted subject—"There is ——." "There are ——."

V. Adverbs of degree—"Almost," "too," "rather," "a little," "very hard," etc.

VI. A noun modified by a phrase as the subject or object of a sentence. "A girl with long curly hair came into the room." "Mary has a doll without a head," etc.

Write such sentences in the five slates, showing that the whole girl, hair and all, belongs in the first slate, and the doll with all its deficiencies occupies the third column. To make it quite clear, the teacher may substitute a picture in the place of the written words.

VII. Names of things requiring a modifying phrase—"A loaf of bread," "a paper of pins," "a can of corn," etc.

VIII. Parts of things: The back of a chair. The handle of a broom. The heel of a shoe.

IX. One of —— the others. One —— the rest. Some —— the rest. Some —— the others.

X. Some —— not any. Somebody —— nobody or not anybody.

XI. The present participle following the verbs "to see" and "to hear." "I saw a man standing on the corner." "A woman heard a baby crying."

Miss Sweet has the comparative degree of adjectives in her second book, but we have found the year full enough without it, and so have left it for the next year.

All these language principles (if we may call them principles) should be included in the language stories, repeated again and again in the lip-reading stories, and drilled upon in special drill lessons. By constant repetition the language is driven home.

Lip-reading stories.—The lip-reading stories grow a little longer. They follow in the wake of the language story, reviewing, reviewing, reviewing. If a new word is to occur in a story, it should be given in advance, so that the story may be told as a whole without breaking the thread.

Chart stories.—As many as possible of the good old fairy stories should be read in this year. The children should use books as well as charts for their reading lessons. One good way to interest them in books is to read the story to them, making such explanations as are necessary. Then let them take the books and read the story themselves, and later choose their parts and dramatize it. Ask a few questions to see if they understand, but do not destroy the pleasure of the story.

Verb drill goes on and on like the streams that water the meadows. Except for the infinitive and the present participle following the verbs "to see" and "to hear," no new verb forms are introduced in this year, but the old ones must be kept constantly in mind. Fill in the verb outline, conjugate, write elliptical sentences, using time phrases. Have children correct their own mistakes at all times by referring to the verb outline. In spite of all this, verbs will continue to be the bane of the teacher's existence.

Questions.—The new questions to be asked and answered by the class are:

"How —— { taste? feel? smell? look?

"Why ——? To ——. Where did —— get ——? With a knife? With scissors? On his back? etc.

"How ——

"What —— for?"

Personal questions about home and school. The hidden object is forever interesting, as are the other games played in the second year. In playing them

this year they will have more questions to ask. There should also be formal drill in question forms, as: "I bought a new dress." Ask me five questions. "I saw a dog." Ask me six questions.

The question written from the answer continues to be one of the drills following the language story.

In this year children should be able to give either the long or short answers to questions.

Direct and indirect discourse.—In the second half of the year direct and indirect discourse begins. The imperative form in the direct is changed to "told to" or "told —— not to," "asked —— to" or "asked —— not to."

Miss Willoughby's book Direct and Indirect Discourse gives clearly the steps in teaching this. The ability of the class will decide how much of this work can be taken in the third year.

NECROLOGY

NECROLOGY.

WILLIAM ANDERSON BOWLES.

William Anderson Bowles, born February 26, 1850, in Louisa County, Va. Died March 10, 1919, at Staunton, Va. Mr. Bowles was graduated from the University of Virginia with the class of 1873. He first taught in the public schools of Virginia, was principal of the high school and later superintendent of schools in Staunton, principal of the high school in Richmond, and in 1896 was elected superintendent of the Virginia School for the Deaf and the Blind, which position he occupied at the time of his death. Mr. Bowles was a member of the State board of charities and corrections, State board of education, board of trustees of the Mary Baldwin Seminary, and president of the Staunton Young Men's Christian Association. "Mr. Bowles lived for the good that he could do. He loved his God and his fellow men, did his work faithfully and well, and as he neared the end of his career 'calmly he looked on either life, and here saw nothing to regret or there to fear."

H. L. BRANSON.

H. L. Branson, born at Waverly, Ohio, in 1857. Died at Columbus, Ohio, February 25, 1918. Began his work among the deaf as instructor of printing at the Ohio school in Columbus, where he remained four years. He then went to the Western Pennsylvania Institution, where he was instructor in printing from November, 1901, until the time of his death.

ETTA BROWN.

Etta Brown, died March 27, 1920. Mrs. Brown was traveling teacher for the California school.

ABEL S. CLARK.

Abel S. Clark, died March 14, 1918, at Hartford, Conn., after a long period of failing health. He began teaching in the American school in September, 1867, where he served until 1915, giving 48 years of faithful, efficient service to the school. "He was a man of culture and piety, a devoted teacher, strict but just, firm in his convictions, faithful and untiring in his efforts for the betterment of the deaf."

ADDIE L. COFFIN.

Addie L. Coffin, died at her home in Indiana September 6, 1920. During the previous school year Miss Coffin, a valued teacher of several years' service in the Minnesota school, had suffered a general breakdown in health, and was forced to go to her home for rest and recuperation. She was on the road to recovery when she contracted typhoid fever and succumbed. She had been a faithful and conscientious teacher. She gave unsparingly of her time and none too abundant strength in the effort to advance the interests of her class and of the deaf as a whole. She found her greatest happiness in being of service to others.

WESLEY O. CONNOR.

Wesley O. Connor, died at Cave Spring, Ga., February 18, 1920, aged 79 years. He became a teacher in the Georgia school in 1857. He served through the Civil War in the Confederate Army. In 1862 the Georgia school had been closed, but it was reopened in 1867, and Mr. Connor became head of the institution, in which position he remained for 49 years. In 1916 he retired, becoming

principal emeritus. Mr. Connor was president of the fourteenth convention which met at Flint, Mich., in 1895. From 1890 to 1895 he was a member of the executive committee. "He was an ardent lover of nature, a man of warm and generous sympathies, deeply loved by his pupils, and with numerous friends among the teachers of the deaf."

JOSEPH REGINALD COOK.

Joseph Reginald Cook, born February 17, 1870, at Lemonville, York County, Ontario. Died August 14, 1918, at Winnipeg, Manitoba, Canada. Mr. Cook was educated at the Ontario School for the Deaf. In 1893 he became connected with the Manitoba school as instructor in printing, and two years later became a literary teacher in addition to his work in the printing department. He remained in this position until his death.

JAMES FEARON.

James Fearon, born at Portadown, Ireland, in 1866. Died at Wolfville, Nova Scotia, June 29, 1918. He began his work as teacher in the Ulster Institution at Belfast, Ireland. For a while he gave up teaching to become a newspaper reporter, but returned to the profession as a teacher in the Margate school. From there he went to the Birmingham school, and from the latter place was called to head the Halifax school, where he remained in charge for 27 years. His death was indirectly due to explosion in the harbor of Halifax. His health, which was beginning to fail at that time, could not withstand the shock of the disaster, which partly wrecked his school. His death was a great loss to the educational work which he loved, and to the community in which he lived.

HELEN J. FLAGG.

Helen J. Flagg, died January 20, 1919, at Hartford, Conn., after a brief illness of influenza. She was a faithful teacher in the Hartford school, and has been sadly missed by the school, and by the pupils who had learned to love her, and by her associates who deem it a great privilege to have known her.

KATE S. HERMAN.

Kate S. Herman died May 5, 1920, at Olathe, Kans. Mrs. Herman received her training under the late Dr. Isaac Lewis Peet at the New York Institution. She became a teacher in the Kansas school in the early eighties, resigning a few years later to be married. After the death of her husband she returned to the profession as a teacher in the Kansas school, becoming superintendent of the institution in the summer of 1913, which position she retained until the time of her death.

MAJ. G. A. JOINER.

Maj. G. A. Joiner, born in Talladega, Ala., October 23, 1843, died in December, 1918.

It was no superficial interest that Maj. Joiner took in the schools of which he had the honor of being trustee for over 25 years. In spite of the demands upon his time made by his many business connections, he was never too busy to devote a whole-hearted attention to the affairs of the school for the deaf. On the contrary, he made its interests his business, as was shown by his intimate acquaintance with the need and machinery of the institution. Moreover, he familiarized himself wth educatonal matters by attendng conventions of instructors as few others in a like position have done.

ELLA CELYNDA JORDAN.

Ella Celynda Jordan, born in Newton Falls, Mass., September 6, 1852. Died January 13, 1920. She was appointed a teacher of the Horace Mann School in 1872, and became its principal in 1910. She resigned November 10, 1919, on account of the serious illness which resulted in her death.

GRACE LANDON.

Grace Landon, died January 12, 1919, of influenza. Miss Landon was trained at the Scranton school, and had taught two years in the North Carolina school.

ADA LAIN McDOUGAL.

Ada Lain McDougal, died June 11, 1919, at Gibson Wells, Tenn. Taught drawing classes and later primary manual grades in the Arkansas school. She was educated at the school at Little Rock, and had developed a decided talent for drawing and painting.

DAVID WALLACE McKEE.

David Wallace McKee, born at Indianapolis, Ind., July 27, 1890. Died at Wilkinsburg, Pa., February 8, 1919. He was educated at Westminster College, Fulton, Mo., and taught in the Western Pennsylvania Institution five years. He was a son of the late Noble B. McKee, for many years superintendent of the school for the deaf at Fulton.

LAURANCE E. MILLIGAN.

Laurance E. Milligan died March 28, 1920, of tuberculosis after an illness of a few weeks. He was 44 years old. Mr. Milligan's father served as a teacher in the Illinois and the Pennsylvania schools, and as superintendent of the Wisconsin school, later becoming a professor in Illinois college. Mr. Milligan was a graduate of this college and received his training for work among the deaf at Gallaudet, graduating with the normal class of 1900. He served as a teacher in the Georgia and the Colorado schools, became president of the Montana school, and in 1912 accepted the principalship of the California school. During his eight years of service at Berkeley he conducted the affairs of the school with great success. His untimely death was a loss to the California school and to the profession.

CHARLES S. PERRY.

Charles S. Perry died January 19, 1919. Mr. Perry was librarian of the California school at Berkeley, where he had previously taught for many years.

JOHN EDWIN RAY.

John Edwin Ray died at Raleigh, N. C., January 17, 1918, aged 66. Mr. Ray was a graduate of Wake Forest College and began his career at the Raleigh school. He was superintendent of the Colorado school from 1887 to 1894, and of the Kentucky school from 1894 to 1896. From the latter year until his death he was superintendent of the school at Raleigh. Mr. Ray stood high in the councils of the Baptist church, and held several important offices in that body. He attended and took part in many of the meetings of the convention and the conference. He was a master of the sign language and often served as interpreter for the deaf.

HENRY W. ROTHERT.

Henry W. Rothert died January 29, 1920, aged 79 years. Mr. Rothert was at the time of his death superintendent emeritus of the Iowa school at Council Bluffs. He became superintendent in the fall of 1887. In 1902 fire destroyed the institution and Mr. Rothert rebuilt it, the present group of buildings standing as a monument to his energy and resourcefulness. He was superintendent of the school for a period of 32 years, retiring in the summer of 1919. The board, in appreciation of his long and honorable service, continued him on the pay roll with the title superintendent emeritus. The Council Bluffs Nonpariel pays him the following tribute:

"The record is good, and it is now finished. Henry W. Rothert wrought well for his fellowmen. He lived a good life, fought a good fight, and goes to his reward after having lived and served beyond the scriptural allotment of three

score years and ten. His memory will be gratefully cherished by hundreds of boys and girls who were beneficiaries of his energy and service fitting them to live and serve."

MARGARET SALLEE.

Margaret Sallee, born at Mill Springs, Ky., November 24, 1878; died of typhoid fever at her home in Danville, Ky., July 19, 1919. She was educated at the Kentucky College for Women, received her training for work among the deaf at the Mount Airy Institution, and taught in that school for a number of years. She taught successively in the Kentucky school, the Lexington Avenue school, in Lebanon, Tenn., and then returned to Danville, where she taught until the time of her death. She was a most excellent and painstaking teacher, devoted to her work, and a lover of children. Her death was a loss not only to the Kentucky school but to the profession.

CAROLINE R. SMITH.

Caroline R. Smith, born in Bedford, Ind.; died in Philadelphia March 28, 1919. She was a teacher of many years' standing in the advanced department of the Pennsylvania institution, and was highly regarded by her associates.

R. E. STEWART.

R. E. Stewart, died in Council Bluffs, Iowa, February 6, 1920. Mr. Stewart was born in Pennsylvania in 1862, coming to Des Moines, Iowa, when a young man to engage in business with his brother. He became a teacher in the Iowa school in 1898, and in 1901 was appointed superintendent of the Nebraska school. He resigned after five years and engaged in the banking business. In 1909 he was reappointed superintendent of the Nebraska school, and after resigning in 1912 he again became a teacher in the Iowa school, where he remained until the time of his death. Mr. Stewart was a quiet, modest man, and a faithful worker. He was popular with his pupils, and no deaf person ever appealed to him for help in vain. He very often acted as interpreter and was always ready to do what he could for the welfare of the deaf.

WILLIAM H. WEEKS.

William H. Weeks died at Hartford, Conn., December 27, 1917, aged 88. He had been a teacher of the deaf for 64 years. He taught for 16 years at the New York institution and for 48 years at the Hartford school. "Like Enoch of old, he walked with God and he was not, for God took him."

ZENAS FREEMAN WESTERVELT.

Zenas Freeman Westervelt, died at Rochester, N. Y., February 17, 1918, aged 69. Dr. Westervelt founded the western New York school in 1876, and was superintendent and principal from that time until his death. His childhood was spent among the deaf, his mother being matron of the Ohio school. From 1871 to 1873 he taught in the Maryland school and from 1873 to 1875 in the Fanwood school. After founding the western New York school, Dr. Westervelt decided upon the exclusion of the sign language, making the manual alphabet the means of communication. He was also a believer in oral instruction, but he preferred the manual alphabet, contending that it afforded more opportunity for practice in the use of the English language. He was secretary of the American Association to Promote Teaching of Speech to the Deaf from its founding in 1890 to the time of his death. In 1895 the University of Rochester conferred upon him the honorary degree, doctor of laws. "Wr. Westervelt was a man of sincere piety. He gave himself to the work of the school with unwearied devotion. He took a deep personal interest in the welfare of every pupil and every teacher, and was rewarded by the love and gratitude of all with whom he was associated."

WARRING WILKINSON.

Warring Wilkinson, born at Charlton, N. Y., May 25, 1834; died at Berkeley, Calif., April 7, 1918. He was educated at Poughkeepsie Collegiate Institute and Union College. Dr. Wilkinson's first work among the deaf was as a teacher in

the Fanwood school from 1857 to 1865, when he was called to take charge of the California institution at Berkeley. This position he filled with great credit to himself and the profession until 1909, when he retired, becoming principal emeritus. Dr. Wilkinson was fortunate to receive his early training in the profession under Dr. Harvey P. Peet. He was always an earnest supporter of the sign language in the education of the deaf. While he introduced the teaching of speech in the California school, he was never enthusiastic over the pure oral method of instruction, and his record as an educator was made by the use of the combined system. When Dr. Wilkinson went to the California school in 1865 it was at that time conducted as a private charitable institution, with only a few pupils, in crowded and inconvenient quarters in San Francisco. Through his energy, initiative, and resourcefulness, he soon obtained a large tract of land in what is now Berkeley, and began thereon the erection of a new school under the direction of the State. The present California institution is a monument to his ability as an executive and an educator.

VIVA WIND.

Viva Wind, born in Council Bluffs, Iowa; died in Salt Lake City, Utah, May 3, 1919. She taught in the Iowa school in 1910–11, took the normal course at the Clarke School, and taught in the Utah school from 1911 to 1919. Miss Wind was a teacher of rare ability, and left a deep impression upon her pupils and all with whom she came in contact.

INDEX.

AUTHORS AND SPEAKERS.

SUBJECTS.

○